



# Global Adults Tobacco Survey

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## Viet Nam 2015



**MINISTRY OF HEALTH OF VIET NAM  
HANOI MEDICAL UNIVERSITY  
GENERAL STATISTICS OFFICE**

**CENTERS FOR DISEASE CONTROL AND PREVENTION  
WORLD HEALTH ORGANIZATION**

# **GLOBAL ADULT TOBACCO SURVEY (GATS) VIET NAM 2015**

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# Foreword

According to the World Health Organization, 10% of the Vietnamese population will die of tobacco-related diseases by 2020 if strong tobacco control measures are not taken.

To protect the Vietnamese people from burdens related to tobacco use, the Ministry of Health Viet Nam is strongly committed to the policies recommended by the Framework Convention on Tobacco Control. Viet Nam's strong and comprehensive tobacco control law was approved since 2012, and the Viet Nam Tobacco Control Fund was set up in 2014 to ensure sustainable resources for interventions.

The Global Adult Tobacco Survey (GATS) was conducted in 2015 with the aim of collecting information related to the six measures recommended by the World Health Organization as **strategies for tobacco control**, called the MPOWER package. These measures include monitoring trends in tobacco use. To learn of trends in tobacco use in Viet Nam, GATS 2015 data were compared with GATS 2010 data. In addition, the GATS data will be used to support eventually evaluating and planning interventions for tobacco control in Viet Nam.

We appreciate the contributions to the success of the survey made by international and national organizations, namely Bloomberg Philanthropies, Bill and Melinda Gates Foundation, Centers for Disease Control and Prevention, CDC Foundation, World Health Organization, General Statistics Office of Viet Nam, and Ha Noi Medical University. The valuable technical and financial support from these organizations contributed significantly to the success of tobacco control activities in Viet Nam.

**Professor Nguyen Viet Tien**  
**Vice Minister of Health**

# Acknowledgments

With great dedication and considerable contributions from national and international organizations, Viet Nam conducted the Global Adult Tobacco Survey (GATS) in 2010 and 2015. GATS is the global standard for systematically monitoring adult tobacco use and tracking tobacco control indicators. First, we express our heartfelt gratitude to Bloomberg Philanthropies and the Bill and Melinda Gates Foundation for their valuable support in initiating GATS in the countries with the highest number of tobacco users, including Viet Nam.

Since the beginning of the second GATS in 2015, we received close and valuable technical assistance from the Centers for Disease Control and Prevention (CDC) for development of questionnaires, sample design, data analysis, report writing, and fact sheets, as well as standardized GATS methodology and protocols in a series of manuals and guidelines. Our appreciation goes out to CDC for these valuable contributions.

Our sincere thanks also go to the staff of the World Health Organization, to those at its Headquarters, its Regional Office, and its country office in Viet Nam for facilitating GATS implementation, providing technical and management assistance, and coordinating national and international partners.

We acknowledge and appreciate the strong commitment, leadership, and support from Viet Nam Ministry of Health and Ministry of Planning and Investment for completing this survey. Excellent cooperation from the Viet Nam Steering Committee on Smoking and Health, the General Statistics Office, and Ha Noi Medical University contributed to the success of this project.

The collaboration and support of related governmental and nongovernmental organizations and tobacco control experts were also highly appreciated.

Finally, we gratefully acknowledge the hard work of field supervisors, field interviewers, and all survey respondents. Without their contributions, our work would never have been possible.

# Executive Summary

## INTRODUCTION

Tobacco use is associated with many non-communicable diseases such as cardiovascular disease, cancers, chronic respiratory diseases, and diseases of the digestive tract. Globally, nearly 6 million people die every year of tobacco-related diseases[1]. In Viet Nam, smoking is the main form of tobacco use, and tobacco use is common. According to the Global Adult Tobacco Survey (GATS) conducted in Viet Nam in 2010, the prevalence of smoking among adults aged 15 years or older was 23.8%, with a higher percentage among males (47.4%) than among females (1.4%). Approximately 73.1% of adults reported exposure to secondhand smoke (SHS) at home, and 55.9% reported such exposure in the workplace. Despite such high levels of tobacco exposure in Viet Nam, the total tax on cigarettes remains low at 41.6% of the retail price.

Viet Nam signed the WHO Framework Convention on Tobacco Control on August 8, 2003, and ratified it on November 11, 2004. In 2012, the Law on Prevention and Control of Tobacco Harms was enacted, which significantly strengthened tobacco control policies in Viet Nam. The new law established smoke-free places; increased the size of graphic health-warning labels; instituted a comprehensive ban on tobacco advertising, promotion, and sponsorship; and established the first Viet Nam Tobacco Control Fund.

GATS is the global standard for systematically monitoring adult tobacco use and tracking key tobacco control indicators. GATS was launched in January 2007, financed by the Bloomberg Initiative to Reduce Tobacco Use. GATS partners include the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), the CDC Foundation, the Johns Hopkins Bloomberg School of Public Health, and in-country partners. The first GATS was conducted in 15 countries; the second GATS was conducted in six countries.

GATS was conducted in 2010 in Viet Nam, and it provided useful information for tobacco control law advocacy and development. To update information on tobacco control in Viet Nam, a second GATS was conducted in 2015 to assess the current use of tobacco products among adults aged 15 or older. The results will be used to support advocacy of legal developments and improvement in interventions.

## OBJECTIVES

The main objectives of this survey were the following:

1. Update information on tobacco use and other information related to the six strategies for tobacco control recommended by the World Health Organization (WHO).
2. Monitor trends in tobacco use and related indicators in Viet Nam, and compare the 2015 findings with those of GATS 2010.
3. Support evaluating existing interventions and develop new ones to reduce tobacco use in Viet Nam.

The survey design requirements for this study were developed so that precise estimates could be generated for the entire country as well as for residence (urban areas compared with rural areas) by gender (males compared with females).

## METHODOLOGY

GATS 2015 Viet Nam was designed to be a nationally representative household survey of all noninstitutionalized men and women aged 15 or older. The sample size was calculated to obtain reliable estimates of key variables for gender by urban or rural area. A two-stage random systematic sampling method was used. In the first stage of sampling, the primary sampling unit (PSU) was an enumeration area (EA). On average, each EA in urban areas had 133 households, and each EA in rural areas had 120 households. The sample frame consisted of 15% of all Viet Nam's 170,000 EAs. The sample for GATS 2015

Viet Nam was selected by using a stratified random sample with a probability-proportional-to-size approach. With the aim of completing 8,200 interviews, the final sample consisted of 315 EAs in urban areas and 342 EAs in rural areas.

At the second stage of sampling, to target 4,100 people for each stratum of urban or rural area, 10% of households in each EA were selected. Thus, 15 households from the selected urban EA and 14 households from the selected rural EA were chosen by using simple systematic random sampling. The total number of households that completed an interview for GATS 2015 was 9,206 (4,543 households in urban areas and 4,663 households in rural areas). One eligible household member from each participating household was then randomly chosen for the individual interview. A total of 8,996 individual interviews were completed, and the overall response rate was 95.8%.

The survey used a questionnaire that consisted of core questions used in all countries and specific questions for Viet Nam. The questionnaire consisted of 10 sections: 1) Background characteristics; 2) Tobacco smoking; 3) Electronic cigarettes; 4) Smokeless tobacco; 5) Cessation; 6) Secondhand smoke; 7) Economics; 8) Media; 9) Knowledge, attitudes, and perceptions; and 10) Observation of pictorial graphic health warnings and tax stamps on cigarette packs.

The Viet Nam Steering Committee on Smoking and Health (VINACOSH) of the Ministry of Health was the lead agency, and the General Statistics Office of Viet Nam conducted the data collection. WHO in Viet Nam and Hanoi Medical University provided assistance for supervision. All the interviews were conducted in Vietnamese, and Samsung Galaxy tablets were used to record the survey data. Data were analyzed by using SPSS version 22, and weighted prevalence estimates were calculated.

## MAIN FINDINGS

### Tobacco Use

In 2015, the prevalence of current smoking was 45.3% for men, 1.1% for women, and 22.5% overall. There were 15.6 million people who smoked tobacco in Viet Nam. Of those overall smokers, 85.3% smoked on a daily basis, 80.6% smoked cigarettes, 29.8% smoked traditional water pipes, and 0.4% smoked shisha water pipes. The proportion of current smokeless tobacco use was 1.4% overall (0.8% of males and 2.0% of females). The proportion of adults who ever used an electronic cigarette was 1.1%; and 0.2% were current electronic cigarette users.

Approximately 75.9% of daily cigarette smokers smoked 10 cigarettes or more per day; 37.6% smoked 20 cigarettes or more per day. The average age at daily smoking initiation was 18.8 years for men and 18.8 years overall. Among current daily smokers, 63.0% had their first cigarette of the day within 30 minutes after waking up. The prevalence of former smokers among ever smokers was 29.0%.

***A comparison between GATS 2010 and GATS 2015 showed the following:*** The overall prevalence of current smoking in 2015 tended to decrease (overall: 22.5% in 2015 vs. 23.8% in 2010; among males, 45.3% in 2015 vs. 47.4% in 2010; and among females, 1.1% in 2015 vs. 1.4% in 2010).

- Prevalence of cigarette smoking overall decreased from 19.9% in 2010 to 18.2% in 2015.
- Prevalence of general tobacco smoking in urban areas decreased significantly from 23.3% in 2010 to 20.6% in 2015. Among males this indicator was 47.7% in 2010 and 42.7% in 2015.
- Prevalence of cigarette smoking among males in urban areas decreased significantly from 45.2% in 2010 to 38.7% in 2015.



## Secondhand Smoke (SHS)

In 2015, about 42.6% of those who worked indoors were exposed to SHS in indoor workplaces during the previous 30 days (54.4% of males and 29.9% of females). Among nonsmoking workers, the prevalence of exposure to SHS in indoor workplaces was 36.8% overall (47.7% of males and 29.9% of females).

About 59.9% of adults aged 15 years or older were exposed to SHS at home (65.2% of males and 55.0% of females). Among non-smokers, the prevalence of exposure to SHS at home was 53.5% (51.3% of males and 54.6% of females).

Among adults who visited various public places in the previous 30 days, the highest rate of smoking occurred in bars/cafes/teashops (89.1%) followed by restaurants (80.7%). The rate of smoking was 30.9% in government offices; 18.4% in healthcare facilities, and 19.4% on public transportation. The rate of exposure to SHS in schools was 16.1% and in universities was 37.9%.

**A comparison between GATS 2010 and GATS 2015 showed the following:** There were significantly lower rates of exposure to SHS in all places, with the largest improvement found in public places. Specifically, prevalence rates.

- In homes, decreased from 73.1% to 59.9%.
- In workplaces, decreased from 55.9% to 42.6%.
- In public places, decreased from 38.7% to 30.9%.
- On public transportation, decreased from 34.4% to 19.4%.
- In universities, decreased from 54.3% to 37.9%.
- In schools, decreased from 22.3% to 16.1%.

## Cessation

In 2015, about 29% of those who have ever smoked quit smoking. Among current smokers, 5.2% reported that they were planning to quit within the next month, 12.6% were thinking of quitting within the next 12 months, and 35.9% would quit sometime in the future but not in the next 12 months. A total of 39.6% of past-year smokers (current smokers and those who quit <12 months ago) made an attempt to quit in the previous 12 months.

Among past-year smokers who visited a healthcare provider (HCP) during the previous 12 months, 45.6% were asked whether they smoked tobacco, and 40.5% of them received advice from the HCP to quit smoking. In the previous 12 months, 3.0% of past-year smokers used nicotine replacement therapy to try to quit smoking: 17.3% used regular chewing gum, and 0.3% used prescription medications. Only 2.3% of past-year smokers sought counseling to help them stop smoking. Among those who attempted to quit in the previous 12 months, the most common reasons stated were “adverse health effects of smoking” (87.2%), followed by “family or friends against smoking” (57.9%), “high costs of smoking” (53.4%), “smoking restrictions in indoor public places” (28.5%), and “society looking down upon smoking” (17.3%).

**A comparison between GATS 2010 and GATS 2015 showed the following:**

- No change in the rate of smokers who quit smoking (29.3% in 2010 and 29.0% in 2015).
- Significantly higher rates of smokers being asked about their smoking status by an HCP (45.6% in 2015 vs. 34.9% in 2010), and smokers being advised to quit smoking by the HCP (40.5% in 2015 vs. 29.7% in 2010).



## **Economics**

In 2015, the average amount of money spent on a pack of 20 manufactured cigarettes was 11,819 Vietnamese dong (VND) (approximately US\$0.48). The average yearly cigarette expenditure per cigarette smoker was VND 2,656,549 (approximately US\$ 132.80). The average cost of 100 packs of manufactured cigarettes as a percentage of GDP per capita was 2.5%.

### ***A comparison between GATS 2010 and GATS 2015 showed the following:***

- After adjusting for inflation, the average amount spent on a pack of 20 manufactured cigarettes was lower (VND 11,800 in 2015 vs. VND 12,700 in 2010 at the 2015 price).
- The cost of 100 manufactured cigarettes, as a percentage of GDP per capita was slightly lower, (2.5% in 2015 vs. 2.7% in 2010) but not statistically different.

## **Media**

In 2015, the percentage of adults who reported noticing any kind of cigarette advertisements, sponsorships, or promotions in public places or in the media in the previous 30 days was 16.6% (19.6% males and 13.8% females; 19.8% of individuals aged 15 to 24, and 15.7% of individuals aged 25 or older; 23.3% of the urban population, and 13.2% of the rural population).

In the previous 30 days, 75.3% of adults noticed anti-cigarette smoking information, either broadcast through the media or displayed in a public place. The largest number of adults (64.5%) noticed this information on television, followed by billboards (26.8%), local radio or loudspeakers (21.1%), the Internet (16.8%), and posters (16.3%).

In the previous 30 days, 91.1% of current smokers noticed health warnings on cigarette packs, and 48.5% of current smokers thought about quitting because of the health warnings.

### ***A comparison between GATS 2010 and GATS 2015 showed the following:***

- There was no change in the rate of adults who reported noticing any kind of cigarette advertisements, sponsorships, or promotions in the previous 30 days (16.6% in 2015 vs. 16.9% in 2010).
- There was a significant decrease in the rate of adults aged 15 to 24 who noticed any kind of cigarette advertisements, sponsorships, or promotions in the previous 30 days (19.8% in 2015 vs. 25.3% in 2010).

## **Knowledge, Attitudes, and Perceptions**

In 2015, almost all adults (95.9%) believed that tobacco smoking causes serious illness. The percentages of adults who were aware that smoking causes the following diseases were high: lung cancer (96.6%), stroke (71.5%), and heart attack (69.1%). Approximately 61.2% of adults believed that smoking causes all three of these diseases.

Approximately 90.3% of adults (87% of current smokers and 91.3% of current non-smokers) believed that breathing SHS could cause serious illnesses to non-smokers.

The proportion of those who were aware of the penalties for violating smoke-free rules was high at 82.6% overall (85% males and 80.3% females). During 30 days prior to the survey, the proportion of smokers who reported they smoked in places where they were not allowed to smoke was 4.1%. Among these smokers who reported violating smoke-free rules, only 0.8% were punished by authorities, 6.2% were reminded about the smoke-free rules by authorities, and 20.9% were reminded about the smoke-free rules by other people.

### ***A comparison between GATS 2010 and GATS 2015 showed the following:***

- There was improvement in the knowledge of adults about the harms of tobacco smoking as well as the harms of exposure to SHS.

## **CONCLUSION**

GATS Viet Nam 2015 provided national estimates of tobacco use and related information about tobacco use according to the six strategies for tobacco control under WHO recommendations (collectively called MPOWER). GATS 2015 allowed comparisons with findings from GATS 2010. The Law on Prevention and Control of Tobacco Harms in Viet Nam, which has been in effect since 2013—together with the implementation of several supporting legal documents and guidelines—has led to significantly positive changes in tobacco control. Specifically, GATS 2015 found that:

1. The prevalence of indoor exposure to SHS in most places significantly declined from 2010 to 2015, including in homes (73.1% to 59.9%), in workplaces (55.9% to 42.6%), in schools (22.3% to 16.1%), and on public transportation (34.4% to 19.4%).
2. The prevalence of tobacco smoking among men in urban areas decreased from 47.7% to 42.7%. The decrease was especially significant for cigarette smoking, which decreased from 42.5% to 38.0%.
3. The proportion of smokers who visited HCPs during the previous 12 months, who were asked about their smoking status, and who were advised to quit smoking by the HCP was up significantly (from 34.9% to 45.6% asked about smoking status and from 29.7% to 40.5% advised to quit).
4. There was a clear improvement in the public's awareness of the dangers of smoking and exposure to SHS.
5. The proportion of smokers who noticed health warnings on cigarette packages remained high (91.1% in 2015).

### **Some limitations and challenges to tobacco control in Viet Nam:**

1. The prevalence of tobacco smoking in 2015 was slightly lower than in 2010 (overall 23.8% in 2010 vs. 22.5% in 2015).
2. Prevalence of SHS in all public places declined but is still at a high level.
3. Although noticing cigarette advertising and promotions significantly declined among those aged 15 to 24 (the age group most commonly targeted by the tobacco industry) from 25.3% in 2010 to 19.8% in 2015, the overall prevalence of adults noticing cigarette advertising and promotions did not decrease.
4. Cost of 100 manufactured cigarettes as a percentage of GDP per capita was slightly lower than in 2010, but not statistically different (2.5% in 2015 vs. 2.7% in 2010).
5. The proportion of former smokers among ever smokers remained unchanged (29.3% in 2010 vs. 29.0% in 2015). However, smokers who attempted to quit decreased significantly from 55.3% to 39.6%.

## Recommendations

Several important indicators of tobacco control improved from 2010 to 2015, especially reductions in exposure to SHS in public places and prevalence of tobacco smoking among men in urban areas. But the overall decrease in tobacco smoking prevalence was not significant, which indicates that more efforts are needed to reduce harms caused by tobacco use, especially in rural areas. Concrete action plan should be developed to strengthen implementation of the WHO MPOWER package and national tobacco control law:

1. **Monitor tobacco use, tobacco products and implementation of prevention policies:** Continuous monitoring of tobacco use and related indicators is important for producing evidence for effective and timely interventions at various levels.
2. **Protect people from tobacco smoke:** Implementation of smoke-free policies improved, which resulted in a significant reduction in exposure to SHS. However, exposure is still high in homes, workplaces, public places, and especially in restaurants (at 80.7%). Smoke-free laws and their enforcement should be strengthened, with special focus on the hospitality sector. Exposure to SHS can be reduced by strictly implementing 100% smoke-free policies for indoor public areas.
3. **Raise taxes on tobacco:** The tobacco tax in Viet Nam is estimated at about 41.6% of retail price, among the lowest in the world. Therefore, policy-makers need to raise excise tax on tobacco products to the level that will reduce the affordability of tobacco products. Increasing taxes on tobacco products is an evidence-based strategy proven to reduce consumption and increase national tax revenue.
4. **Enforce bans on tobacco advertising, promotion, and sponsorship (TAPS):** To protect young people from exposure to TAPS, regular monitoring of TAPS should be conducted. The enforcement of the TAPS ban should be strengthened.
5. **Warn about the dangers of tobacco:**
  - a. Communication activities should be strengthened to sustain and increase the public's awareness of the dangers of tobacco use, especially in rural areas. Modern communication means (i.e. digital communications) should be used so that the tobacco control messages can reach to a higher proportion of the population.
  - b. Graphic health warnings have been implemented on cigarette packs for more than two years, so a new set of pictorial health warnings with hard-hitting pictures should be applied as soon as possible to increase the impact. Larger size for the warning pictures on the cigarette packs should also be considered.
6. **Offer help to quit tobacco use:** The rate of smokers making quit attempts is still low. To encourage and support smokers to quit, a national cessation program should be established and existing programs should be strengthened. Especially important are services such as hotlines and community-based cessation consultation services.

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# 1. Introduction

Tobacco use is associated with many noncommunicable diseases, such as cardiovascular diseases, cancers, chronic respiratory diseases and diseases of the digestive tract. Globally, nearly 6 million people die every year of tobacco-related diseases [1]. This figure is expected to rise to 10 million deaths a year by 2030, with 70% of these deaths occurring in developing countries. In Viet Nam, smoking is the main form of tobacco use, and it is common. According to the Global Adult Tobacco Survey (GATS) conducted in Viet Nam in 2010, the prevalence of smoking among adults aged 15 years or older was 23.8%, far higher among males (47.4%) than females (1.4%). The prevalence of exposure to secondhand smoke (SHS) is of concern, with 73.1% of adults reporting exposure to SHS at home and 55.9% at work. Of all respondents, 55.5% believed that smoking may cause lung cancer, stroke, and heart disease. Most adults (91.6%) had seen anti-smoking media messages [2]. Despite such high levels of tobacco exposure in Viet Nam, the total tax on cigarettes remains at 41.6% of the retail price [3]. Furthermore, only 29.7% of smokers were advised to quit by a healthcare provider in the 12 months before the survey [2].

In Viet Nam, tobacco control received recent attention. The Vietnamese government's readiness to curb the tobacco epidemic was well reflected in Government Resolution No 12/2000/NQ-CP on National Tobacco Control Policy 2000 – 2015 [4]. Viet Nam signed the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) on August 8, 2003, and ratified it on November 17, 2004. The National Tobacco Control Policy in Government Resolution No. 12/2000/NQ-CP set out objectives on numerous aspects of tobacco control including, but not limited to, public education; prohibitions on tobacco advertising, promotion, and sponsorship; health warnings; tax and price; smoking cessation; and restrictions on public smoking. In 2012, the National Assembly enacted the comprehensive Law on Prevention and Control of Tobacco Harms [5], which significantly strengthened tobacco control policy in Viet Nam. The first-ever comprehensive tobacco control legislation in Viet Nam – a public health milestone for the country – took effect on May 1, 2013, after being adopted by the National Assembly on June 18, 2012. The new law is in accordance with the FCTC. It establishes smoke-free places; increases the size of graphic health warning labels; restricts tobacco advertising, promotion, and sponsorship; and establishes a tobacco control fund. To date, implementing regulations associated with the 2012 law has been adequate: for example, joining circular 05/2013/TTLT-BYT-BCT on labeling and printing health warnings on the packaging for tobacco products [6]. In addition, decree no 176/2014/ND-CP imposes sanctions on administrative violations of public health [7]; decree No. 75/2015/ND-CP imposes fines for violations in the cultural sector [8]; and decree No. 147/2013/ND-CP establishes sanctions for violating the ban on smoking in civil aircraft [9].

To respond to the global tobacco epidemic, the Bloomberg Initiative to Reduce Tobacco Use was launched in January 2007; it offers resources 1) to fill the data gap for measuring adult tobacco use globally by means of GATS and 2) to optimize the reach and results of the ongoing Global Tobacco Surveillance System (GTSS). GATS is the global standard for systematically monitoring adult tobacco use and tracking key tobacco control indicators. The GTSS tracks tobacco use and tobacco control measures. It currently consists of three school-based surveys for young people and selected adult populations: the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey (GSPS), and the Global Health Professions Students Survey (GHPSS). GATS is a nationally representative survey, using a consistent and standard protocol across countries. It is a household survey that was launched in February 2007 as a new component of the ongoing GTSS. GATS enables countries to collect data on adult tobacco use and key tobacco control measures. Results from GATS will assist countries in forming, tracking, and implementing tobacco control interventions; and countries will be able to compare results of their survey with

results from other countries. WHO, the Centers for Disease Control and Prevention (CDC), the CDC Foundation, the John Hopkins Bloomberg School of Public Health (JHSPH), and world experts in tobacco surveillance and tobacco control jointly designed the standard protocol for GATS. This survey will collect data on tobacco use in the countries with the highest tobacco use prevalence and track these countries' progress in reducing use and assessing the impact of tobacco control and interventions. GATS is supported by the CDC Foundation with grants from Bloomberg Philanthropies, Bloomberg Initiative to Reduce Tobacco Use, and the Bill & Melinda Gates Foundation. In addition, some countries provided funding or in-kind support. GATS partners are WHO, CDC, the CDC Foundation, JHSPH, and in-country partners.

To date, the following countries have conducted a GATS survey and released the results: Argentina (2012), Bangladesh (2009), Brazil (2008), Cameroon (2013), China (2010), Egypt (2009), Greece (2013), India (2010), Indonesia (2011), Kazakhstan (2014), Kenya (2014), Malaysia (2011), Mexico (2009, 2015), Nigeria (2012), Pakistan (2014), Panama (2013), Philippines (2009), Poland (2010), Qatar (2013), Romania (2011), Russian Federation (2009), Senegal (2015), Thailand (2009, 2011), Turkey (2008, 2012), Ukraine (2010), Uruguay (2010), Uganda (2013), and Viet Nam (2010, 2015). The first GATS in Viet Nam was in 2010; it provided useful information for advocating the 2012 Law on Prevention and Control of Tobacco Harms (Tobacco Control Law). Four years after the first GATS, Viet Nam conducted a second GATS in 2015 to update the 2010 findings.

The second Global Adult Tobacco Survey (GATS2) in Viet Nam sought to monitor tobacco use as required in FCTC Article 20, which states "...integrate tobacco surveillance programs into national, regional, and global health surveillance programs so that data are comparable and can be analyzed at the regional and international levels, as appropriate." Conducting GATS 2010, Viet Nam established a baseline for indicators of tobacco use (smoked and smokeless). Tobacco control measures were tobacco use prevalence; exposure to secondhand tobacco smoke; cessation attempts; economics; exposure to tobacco-related media news and advertisements; and knowledge, attitudes, and perceptions about tobacco. In addition, GATS also helps to systematically 1) monitor adult tobacco use, 2) track key tobacco control indicators in a nationally representative sample of the population of Viet Nam, 3) track changes in indicators, and 4) evaluate the impact of policies. Furthermore, in-country data were compared with regional and global data while building evidence for policy making (especially the Tobacco Control Law) and advancing the implementation of policies related to the FCTC. Repeating GATS in 2015 was critical to efforts to monitor and evaluate tobacco control interventions and tobacco trends in Viet Nam since 2010 as well as to capture data that could be compared with regional and international data.

Specifically, GATS2 in 2015 also supported advocacy for legal development and the improvement of interventions. Article 5(2) of the Tobacco Control Law states that the Ministry of Health is responsible for evaluation and research and for reporting annually to the government on the status of tobacco control activities nationwide. Referring to the activities for implementing the Tobacco Control Law, the National Tobacco Control Policy also states close collaboration with international agencies on research, evaluation, and monitoring of tobacco control policies is necessary for FCTC implementation.

## 2. Objectives

Viet Nam's GATS 2015 was designed to be a nationally representative survey of all noninstitutionalized men and women aged 15 years or older in both urban and rural areas. The main objectives of this survey were:

1. To update information on tobacco use and other related information related to MPOWER (strategies for tobacco control under WHO recommendations).
2. To monitor trends in tobacco use and related indicators in Viet Nam and to compare the 2015 trends with those found by GATS 2010.
3. To support evaluating and developing new interventions for a tobacco control program in Viet Nam.

## 3. Methodology

### 3.1 Study population

GATS 2015 of Viet Nam is the second round of GATS in Viet Nam. GATS 2015 was a nationally representative survey of all non-institutionalized men and women aged 15 or older who considered Viet Nam to be their usual place of residence. Thus, the target population also included individuals who were not Vietnamese citizens but resided mainly in Viet Nam. The target population did not include adults who were visiting the country (e.g. tourists), those whose primary place of residence was a military base or group quarters (e.g. a dormitory), or those who were institutionalized, including people residing in hospitals, prisons, nursing homes, and other such institutions.

Some respondents may have been living at some location other than their usual home when the interviewer visited a household (e.g., college students who usually stay in dormitories, families at their vacation homes, laborers temporarily living at a farm during the harvest season). Those individuals were included in samples of people from their usual place of residence. Consequently:

- When interviewers learned that some people staying in a dwelling unit did not consider that dwelling unit to be their usual place of residence, the interviewers *excluded* the nonresidents from the household roster.
- When interviewers learned that some people who considered a dwelling unit to be their usual place of residence but were not then staying at the unit, the interviewers *included* the missing residents in the household roster.

### 3.2. Sample design

The Viet Nam GATS 2015 sample design is described in detail in Appendix B.

**Sample size:** 8,200. The number was calculated according to standardized GATS protocol, which is required to obtain reliable estimates of the key variables of gender and urban or rural area.

**Sampling framework (master sample):** The sample frame for GATS 2015 was a cluster frame made by the General Statistics Office (GSO) based on the frame of Population and Housing Census 2009 and updated with 2014 data. Based on the Population and Housing Census data 2009, GSO prepared a 15% master sample to serve as a future national survey sampling frame. The master sample contains 25,500 enumeration areas (EAs) from 706 of the 708 districts of Viet Nam (two island districts were excluded from the GSO master sample frame).

**Sampling method** of GATS is two-stage stratified sampling.

The master sample frame of GSO was divided by two stratification variables: 1. urbanization (1 = urban; 2 = rural) and district group (1 = district, town, or city of a province; 2 = plain or coastal district; 3 = mountainous or island district), which means that the master sample frame was divided into six sample frames or six strata:

- 1) Districts, towns, or cities of a province in an urban area.
- 2) Plain or coastal districts in an urban area.
- 3) Mountainous or island districts in an urban area.
- 4) Districts, towns, or cities of a province in a rural area.
- 5) Plain or coastal districts in a rural area.
- 6) Mountainous or island districts in a rural area.

*Sampling stages:*

- In the first stage of sampling, the primary sampling unit (PSU) was an enumeration area (EA).
- In the second stage, households in the EAs were selected; then individuals from each household were selected for interview.

*Selection of EAs:* The number of households in each EA in urban areas was 133 and in the rural was 120; 10% of households in each EA was selected. Thus, 13 households in each EA in urban areas and 12 households in each EA in rural areas were selected. To ensure the number of individuals to be interviewed in the urban was the same as the number interviewed in the rural area (4,100 each), the number of EAs selected in the urban was  $4,100/13 = 315$  EAs and number of EAs selected in the rural area was  $4,100/12 = 342$  EAs.

The number of EAs allocated for each stratum was estimated on the basis of the probability-proportional-to-size (PPS) sampling method by using number of households in each stratum and total number of EAs selected in the urban (U) and in the rural (R) areas, as described below:

$$\text{Number of EAs for U}_{1/2/3} = \frac{\text{Number of urban EAs} \times \text{Number of households in U}_{1/2/3}}{\text{Total number of urban households of master sample}}$$

$$\text{Number of EAs for R}_{1/2/3} = \frac{\text{Number of rural EAs} \times \text{Number of households in R}_{1/2/3}}{\text{Total number of rural households of master sample}}$$

*Selection of households:* From the list all households in each EA, households were selected by using a systematic random sampling method (13 households in each EA in urban areas and 12 households in each EA in rural areas plus the nonresponse rate from previous survey GATS in 2010. Thus, the number of households selected in each urban EA was 15 and in each rural EA was 14). The total number of households for GATS 2015 was 9,513 (4,725 in urban areas and 4,788 in rural areas).

*Selection of individuals for interview (from each selected household):* all household members were listed and one eligible household member from each selected household was then randomly chosen for the interview.

Note that the current design and the design in which EAs were sampled directly from the master sample were analogous. The selection probability of an eligible individual was calculated as a product of selection probability for each stage. The sampling base weight for an eligible individual was the inverse of the selection probability shown above.

### 3.3 Questionnaire

The GATS 2015 Viet Nam questionnaire had 10 sections. Below is a general description of each section. The full questionnaire is in Appendix A:

- **Background characteristics:** Gender, age, ethnicity, education, work status, possession of household items, health insurance status.
- **Tobacco smoking:** Patterns of use (daily, less than daily, not at all), past tobacco use, age of initiation of daily smoking, use of various tobacco products, (e.g., cigarettes, water pipes, other smoked tobacco), nicotine dependence, frequency of quit attempts, use of water pipes, and shisha.
- **Electronic cigarettes:** Heard about electronic cigarettes, use of electronic cigarettes, perceptions about harm from using this product.
- **Smokeless tobacco:** Patterns of use (daily, less than daily, not at all), past use of smokeless tobacco, age of initiation of daily use of smokeless tobacco, use of various smokeless tobacco products (e.g., snuff, chewing tobacco, betel quid).
- **Cessation:** Advised to quit smoking by a healthcare provider, method used to try to stop smoking. Similar information was requested about cessation of smokeless tobacco.
- **Secondhand smoke (SHS):** Smoking allowed in the home; exposure to SHS at home; indoor smoking policy in workplace; and exposure to SHS during previous 30 days in workplace, government buildings or offices, healthcare facilities, restaurants, or public transportation. There were some additional optional items on exposure that include schools, universities, transportation, government buildings, workplaces, healthcare facilities, restaurants, bars/cafés/tea shops, as well as items on knowledge of non-smokers about potential for serious illness due to secondhand smoke.

- **Economics:** Type of tobacco product and quantity bought, cost of tobacco product(s), brand and type of product purchased, and source of tobacco products.
- **Media:** Exposure to tobacco advertisements from television, radio, billboards, posters, newspapers or magazines, cinema, Internet, public transportation, public walls, and other venues; exposure to sporting events connected with tobacco; exposure to music, theatre, art or fashion events connected with tobacco; exposure to tobacco promotion activities; reaction to health warning labels on cigarette packs; and exposure to anti-tobacco advertising and information. Similar questions were included for smokeless tobacco. The reference period for the questions in this section is the previous 30 days.
- **Knowledge, attitudes and perceptions:** Knowledge about health effects of both smoking and smokeless tobacco.
- **Cigarette packs:** pictorial graphic health warning and tax stamp on cigarette packs.

The GATS questionnaire was adapted to the Vietnamese context through the following steps:

- Translation of the final version of the GATS questionnaire into Vietnamese by a language expert.
- Review and adaptation of the Vietnamese version by the core team in various country meetings. Some country-specific questions were added to the questionnaire.
- Back translation of the adapted Vietnamese questionnaire into English.
- The back-translated version of the adapted questionnaire was discussed by the core team together with CDC and WHO/WHO Western Pacific Region (WPRO) during the first technical visit.
- The back-translated adapted questionnaire was submitted to the Questionnaire Review Committee for comments.
- A revised version of the questionnaire was pilot-tested on a sample of 100 individuals (50 in urban and 50 in rural areas). During the pre-test, various aspects of the adapted questionnaire were tested, including wording, inconsistencies in skip patterns, flow and sequencing of questions, errors or changes in wording or translation, additional response categories needed, and workload.
- The GATS questionnaire was revised based on the experience gained during the pre-test and consultations with WHO and CDC.
- The final version of the questionnaire was approved by the Questionnaire Review Committee for the full survey.

### **3.4 Data Collection**

#### ***Implementing Institution***

Data collection was done by the General Statistics Office, under the co-supervision of WHO office in Viet Nam, the Viet Nam Steering Committee on Smoking and Health (VINACOSH), and the Hanoi Medical University (HMU).

#### ***Field Staff and Field Training***

There were 20 data collection teams involved in GATS Viet Nam 2015. Each team consisted of one team leader and 4 interviewers to ensure close supervision and collection of high-quality data. The team leaders and interviewers were chosen from district statistical employees and GSO collaborators. They were qualified staff members with some formal computer skills and previous experience in conducting GSO household surveys, especially experience in health-related surveys of GSO. Team leaders for the GATS2 needed to have experience in conducting household surveys and field work as well as handheld computer skills (Samsung Galaxy Tab 3 7.0). Most of the leaders came from Provincial Statistics Office (PSOs).

Ten supervisors participated in field supervision. Supervisors had good experience in the methodology of the household survey as well as in conducting surveys. They also had good computer skills and experience in troubleshooting data processing systems. Because of these requirements, supervisors were experts from the General Statistics Office (GSO) and HMU.

Two 6-day training workshops were done in two regions: one in the North (Hanoi) and the other in the South (Binh Dinh province). Guest lecturers or resource experts from WHO, CDC, VINACOSH and HMU were invited to help to



ensure that the workshops were being conducted in accordance with GATS2 training guidelines. The training consisted of classroom lectures, discussion, role play, mock interviews, and field practice to familiarize the interviewers with the actual event of interviewing.

### ***Method of Capturing Data***

Handheld computers (Samsung Galaxy Tabs 3 7.0) were used for capturing data. Each interviewer and team leader had one Samsung Galaxy Tab. After completion of sample selection at the central level of GSO, samples of households were drawn from each of the selected EAs. The details of sampled households were assigned to all team leaders and digitally loaded into each interviewer's and team leader's handheld devices. Each day after completing household data collection, the team leader collected data from the interviewers in his or her survey team. All the responses were entered into the computer by stylus-touching the key pad on the screen. The supervisor collected data from assigned team leaders after completing the data collection in 1–2 EAs and transferred the data to a laptop. Supervisors transferred data to the GSO Information Technology (IT) team via the Internet at least twice a week.

Team leaders were responsible for the overall logistics and transportation of the teams, arrangements for field work, identification of sample households, and generally overseeing the coordination of field work. In addition, team leaders had to collect data from interviewers on a daily basis and conduct spot-checks (about 10% of surveyed households) to verify the accuracy of information collected on the eligibility of respondents. In each EA from urban areas, team leaders had to interview two households.

### ***Data Collection***

Data collection was conducted in all 63 provinces of Viet Nam. After two training courses, the Steering Committee established 20 survey teams and built the survey schedule for each team in cooperation with PSOs.

Team leaders carried lists of selected households for assigned EAs. All the selected households were contacted during the main survey, and no replacements were made if a selected household did not respond or a selected individual was absent during data collection. There was a standard provision for at least three call-backs.

Each team interviewed about 500 households on average. Interviewers visited four selected households per day to collect data. Every working day, they were responsible for data transfer to the team leader after completing interviews.

Supervisors visited assigned survey teams to check interview procedures; solve problems of survey specialty, sample, handheld technique, financial procedure that could not be solved by team leaders; conducted spot-checks; re-interviewed 10% of surveyed households; collected data from team leaders after all households in the EA had completed interviews; and transferred data to GSO via the Internet.

### ***Language Used***

All the interviews were conducted in Vietnamese.

### ***Confidentiality and Informed Consent***

Respondents were assured that all answers in the survey would be used only for research and analysis and not for any other purpose and that their identifying data, such as name and address, would never be associated with their interview responses. Parental consent was required for participants aged 15–17 years. Verbal consent by these young respondents was obtained in the presence of their parents.

### ***Data Processing***

Supervisors sent data collected to the GSO on a weekly basis via the Internet. IT personnel received and checked data to make sure result codes were completed and conditions were valid. After data collection, IT personnel aggregated, processed, and converted data to SPSS and STATA formats.

### **3.5 Statistical Analysis**

#### ***Weighting***

Weighting was a step-by-step process using a weighting manual. The three steps are described in brief as follows:

- Create the base weight based on the product of each stage's well-documented selection probability.
- Adjust for household nonresponse and individual nonresponse.
- Produce post-stratification adjustment to balance sample selection.

#### ***Statistical Analysis and Report***

The analysis team followed standard analysis and reporting templates and shared the draft preliminary tables and reports with WHO and CDC for review. Data were processed and analyzed using SPSS version 22 software. Both descriptive and analytical statistical approaches were applied. All estimates were weighted.

## 4. Sample and Population Characteristics

The number and percentage of households and persons interviewed and response rates by residence are presented in **Table 4-1**. Of the 9,514 sampled households, 9,206 were completely screened, giving a household response rate of 98.0%. The household response rate was a little higher in rural areas compared to urban areas (98.5% and 97.4%, respectively). Overall, only 0.3% of the selected households refused to respond to the survey. Of the 9,206 individuals selected from the completely screened households, 8,996 were completely interviewed for a person-level response rate of 97.8%. The person-level response rate was also a little higher in rural areas than in urban areas (98.2% and 97.3%, respectively). Overall, only 0.4% of the selected individuals refused to respond to the survey. In GATS Viet Nam 2015, the total response rate was 95.8% (96.7% in rural areas and 94.8% in urban sites).

**Table 4-1: Number and percentage of households and persons interviewed and response rates by residence (unweighted) – GATS Viet Nam, 2015.**

	Residence				Total	
	Urban		Rural		Number	Percent
	Number	Percent	Number	Percent		
<i>Selected Household</i>						
Completed (HC)	4,543	95.8	4,663	97.7	9,206	96.8
Completed – No one eligible (HCNE)	4	0.1	2	0.0	6	0.1
Incomplete (HINC)	0	0.0	0	0.0	0	0.0
No screening respondent (HNS)	3	0.1	4	0.1	7	0.1
Nobody home (HNN)	77	1.6	51	1.1	128	1.3
Refused (HR)	25	0.5	2	0.0	27	0.3
Unoccupied (HUO)	61	1.3	39	0.8	100	1.1
Address not a dwelling (HAND)	13	0.3	3	0.1	16	0.2
Other <sup>1</sup> (HO)	14	0.3	10	0.2	24	0.3
Total Households Selected	4,740	100.0	4,774	100.0	9,514	100.0
<b>Household Response Rate (HRR) (%)<sup>2</sup></b>	97.4%		98.5%		98.0%	
<i>Selected Person</i>						
Completed (PC)	4,421	97.3	4,575	98.1	8,996	97.7
Incomplete (PINC)	3	0.1	0	0.0	3	0.0
Not eligible (PNE)	1	0.0	2	0.0	3	0.0
Not at home (PNH)	32	0.7	20	0.4	52	0.6
Refused (PR)	24	0.5	13	0.3	37	0.4
Incapacitated (PI)	54	1.2	49	1.1	103	1.1
Other <sup>1</sup> (PO)	8	0.2	4	0.1	12	0.1
Total Number of Sampled Persons	4,543	100.0	4,663	100.0	9,206	100.0
<b>Person-level Response Rate (PRR) (%)<sup>3</sup></b>	97.3%		98.2%		97.8%	
<b>Total Response Rate (TRR) (%)<sup>4</sup></b>	94.8%		96.7%		95.8%	

<sup>1</sup> Other includes any other result not listed.

<sup>2</sup> The Household Response Rate (HRR) is calculated as:  

$$\frac{HC}{HC + HINC + HNS + HNN + HR + HO} \times 100$$

<sup>3</sup> The Person-level Response Rate (PRR) is calculated as:  

$$\frac{PC}{PC + PINC + PNH + PR + PI + PO} \times 100$$

<sup>4</sup> The Total Response Rate (TRR) is calculated as:  

$$\frac{HRR \times PRR}{100}$$

### Notes:

— An incomplete household interview (i.e., roster could not be finished) was considered a non-respondent to the GATS. Thus, these cases (HINC) were not included in the numerator of the household response rate.

— The Total Number of Sampled Persons should be equal to the number of Completed [HC] household interviews.

— A completed person interview [PC] includes respondents who had completed at least question E01 and who provided valid answers to questions B01/B02/B03. Respondents who did not meet these criteria were considered as non-respondents to GATS and thus, were not included in the numerator of the person-level response rate.

**Table 4-2** presents the unweighted sample size and weighted distribution of the sample using population estimates, by selected demographic characteristics. The 8,996 completed interviews represented an estimated 69,259,700 adults aged 15 or older in Viet Nam. Of the study population, 48.5% were men and 51.5% were women. By age group, people age 25-44 made up the largest proportion (41.9%) and those 65 or older accounted for the smallest share (9.3%). Two-thirds of the people aged 15 or older in Viet Nam were living in rural areas. The majority of the study population reported having lower secondary school education (48.3%) or primary or less education (20.4%). People with a college degree or above made up 16.6% of the study population. The main occupation of the study population was elementary (59.5%), while professionals and senior officials accounted for only 4.2% and 1.2%, respectively.

**Table 4-2: Distribution of adults ≥ 15 years by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Weighted		Number of adults (in thousands)	Unweighted number of adults
	Percentage (95% CI <sup>1</sup> )			
<b>Overall</b>	100		69,259.7	8,996
<i>Gender</i>				
Male	48.5 (47.1, 49.9)		33,562.7	3,983
Female	51.5 (50.1, 52.9)		35,697.0	5,013
<i>Age (years)</i>				
15-24	23.0 (21.6, 24.5)		15,932.7	1,147
25-44	41.9 (40.6, 43.2)		29,016.1	3,498
45-64	25.8 (24.7, 26.9)		17,884.6	3,153
65+	9.3 (8.6, 10.0)		6,426.4	1,198
<i>Residence</i>				
Urban	33.8 (32.8, 34.8)		23,395.4	4,421
Rural	66.2 (65.2, 67.2)		45,864.3	4,575
<i>Education level<sup>2,3</sup></i>				
Primary or less	20.4 (18.8, 22.1)		10,873.5	1,607
Lower secondary	48.3 (46.7, 50.0)		25,751.1	3,765
Upper secondary	14.6 (13.5, 15.8)		7,776.9	1,122
College or above	16.6 (15.5, 17.9)		8,862.1	1,346
<i>Occupation<sup>4</sup></i>				
Senior officials	1.2 (1.0, 1.5)		620.9	106
Professionals	4.2 (3.6, 4.9)		2,138.9	307
Associate professionals	4.8 (4.2, 5.5)		2,465.5	350
Elementary occupations	59.5 (57.4, 61.5)		30,303.4	3,781
Other occupations	30.3 (28.4, 32.2)		15,412.8	1,921

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

<sup>2</sup> Primary or less includes "No formal education" and "Not having completed primary education"; Lower secondary includes "Having completed primary education" and "Having completed basic secondary school"; Upper secondary includes "Having completed secondary school"; College or above includes "Graduated university/college/specialized secondary education" and "Having been post-graduated".

<sup>3</sup> Education level is reported only for respondents ≥25 years old.

<sup>4</sup> Senior officials includes "Legislators, senior officials, and managers"; Professionals includes "High qualified professionals"; Associate professionals includes "Technicians and associate professionals"; Elementary occupations include "Elementary occupations"; Other occupations includes "Armed forces", "Clerks", "Service workers and shop and market sales workers", "Skilled agricultural and fishery workers", "Craft and related trade workers", "Plant and machine operators and assemblers", and "Other occupation".

## 5. Tobacco Use

### 5.1. Tobacco smoking

Tobacco smoking status among the study population was categorized as either “current tobacco smoker” or “non-smoker.” Current tobacco smokers included “daily smokers” and “occasional smokers.” Non-smokers included “former daily smokers” and “never daily smokers.”

**Table 5-1** presents the percentage of adults 15 years or older, by detailed smoking status and gender. The overall prevalence of current smokers was 22.5%. That prevalence was particularly high among men when compared with women (45.3% vs. 1.1%, respectively). Overall, 19.2% of adults aged  $\geq 15$  years were daily smokers (38.7% of males and 0.9% of females), and 3.3% were occasional smokers (6.6% of males and 0.2% of females).

Non-smokers accounted for 77.5% of the surveyed population. Overall, 6.7% of adults were former daily smokers, and 70.8% were never daily smokers. The survey found that 68.3% of adults had never smoked in their lifetime and 2.5% were former occasional smokers.

**Table 5-1: Percentage of adults  $\geq 15$  years, by detailed smoking status and gender – GATS Viet Nam, 2015.**

Smoking status	Overall	Male	Female
		<i>Percentage (95% CI)</i>	
<b>Current tobacco smoker</b>	22.5 (21.3, 23.8)	45.3 (43.1, 47.5)	1.1 (0.7, 1.6)
Daily smoker	19.2 (18.0, 20.5)	38.7 (36.6, 40.9)	0.9 (0.6, 1.3)
Occasional smoker	3.3 (2.9, 3.8)	6.6 (5.7, 7.7)	0.2 (0.1, 0.4)
Occasional smoker, formerly daily	1.2 (0.9, 1.5)	2.3 (1.8, 3.0)	0.1 (0.0, 0.2)
Occasional smoker, never daily	2.1 (1.8, 2.6)	4.3 (3.5, 5.2)	0.1 (0.1, 0.3)
<b>Non-smoker</b>	77.5 (76.2, 78.7)	54.7 (52.5, 56.9)	98.9 (98.4, 99.3)
Former daily smoker	6.7 (6.1, 7.3)	13.1 (11.9, 14.4)	0.6 (0.4, 0.9)
Never daily smoker	70.8 (69.5, 72.1)	41.6 (39.4, 43.8)	98.3 (97.7, 98.7)
Former occasional smoker	2.5 (2.2, 3.0)	5.0 (4.2, 5.9)	0.3 (0.1, 0.5)
Never smoker	68.3 (66.9, 69.6)	36.6 (34.5, 38.8)	98.0 (97.4, 98.5)

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

The estimated number of current adult smokers in Viet Nam was about 15.6 million (15.2 million current smokers were male and 388,900 were female). The number of daily smokers was estimated to be 13.3 million (12.99 million male and 309,600 female). The estimated number of occasional smokers was about 2.3 million: more than 2.2 million were male and 79,300 were female (**Table 5-2**).

**Table 5-2: Number of adults ≥15 years, by detailed smoking status and gender – GATS Viet Nam, 2015.**

Smoking status	Overall	Male	Female
<i>Number in thousands</i>			
<b>Current tobacco smoker</b>	15602.4	15213.5	388.9
Daily smoker	13307.8	12998.2	309.6
Occasional smoker	2294.7	2215.3	79.3
Occasional smoker, formerly daily	815.4	788.1	27.3
Occasional smoker, never daily	1479.2	1427.2	52.0
<b>Non-smoker</b>	53657.3	18349.2	35308.1
Former daily smoker	4616.6	4394.2	222.4
Never daily smoker	49040.6	13954.9	35085.7
Former occasional smoker	1760.7	1666.4	94.2
Never smoker	47280.0	12288.5	34991.5

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

**Table 5-3** shows the comparison between GATS 2010 and GATS 2015 in the prevalence of tobacco smoking. From 2010 to 2015, the prevalence of tobacco smoking declined by 5.3%. However, the decline was not statistically significant. Only the prevalence of occasional smoking decreased significantly (23.4%).

**Table 5-3: Percentage of adults ≥15 years old, by detailed smoking status and gender – GATS Viet Nam, 2010 and 2015.**

Smoking status	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>			
Current smoker	23.8 (22.7, 24.9)	22.5 (21.3, 23.8)	-5.3
Daily smoker	19.5 (18.4, 20.5)	19.2 (18.0, 20.5)	-1.2
Occasional smoker	4.3 (3.8, 4.9)	3.3 (2.9, 3.8)	-23.4**
<b>Male</b>			
Current smoker	47.4 (45.4, 49.4)	45.3 (43.1, 47.5)	-4.4
Daily smoker	38.7 (36.9, 40.6)	38.7 (36.6, 40.9)	0.0
Occasional smoker	8.7 (7.6, 9.8)	6.6 (5.7, 7.7)	-23.8**
<b>Female</b>			
Current smoker	1.4 (1.0, 2.1)	1.1 (0.7, 1.6)	-24.5
Daily smoker	1.2 (0.8, 1.8)	0.9 (0.6, 1.3)	-28.5
Occasional smoker	0.2 (0.1, 0.4)	0.2 (0.1, 0.4)	-3.0

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

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## 5.2 Smokeless tobacco use

Smokeless tobacco use in Viet Nam is mostly in the form of chewing tobacco with betel. As shown in **Table 5-4**, the overall prevalence of current smokeless tobacco use was 1.4% (0.8% for males and 2.0% for females). Among adults aged ≥15, 1.0% were daily smokeless tobacco users (0.5% for males and 1.6% for females) and 0.4% were occasional smokeless tobacco users (0.4% for males and 0.4% for females). Overall, 98.4% of the study population were non-users of smokeless tobacco.

**Table 5-4: Percentage of adults ≥15 years, by detailed smokeless tobacco use status and gender – GATS Viet Nam, 2015.**

Smokeless Tobacco Use Status	Overall	Male	Female
	<i>Percentage (95% CI)</i>		
<b>Current smokeless tobacco user</b>	1.4 (1.1, 1.8)	0.8 (0.5, 1.3)	2.0 (1.5, 2.5)
Daily user	1.0 (0.8, 1.4)	0.5 (0.2, 0.9)	1.6 (1.2, 2.1)
Occasional user	0.4 (0.3, 0.6)	0.4 (0.2, 0.7)	0.4 (0.3, 0.7)
Occasional user, formerly daily	0.1 (0.1, 0.2)	0.0 (0.0, 0.1)	0.2 (0.1, 0.3)
Occasional user, never daily	0.3 (0.2, 0.4)	0.3 (0.2, 0.6)	0.2 (0.1, 0.5)
<b>Non-user of smokeless tobacco</b>	98.6 (98.2, 98.9)	99.2 (98.7, 99.5)	98.0 (97.5, 98.5)
Former daily user	0.2 (0.1, 0.3)	0.0 (0.0, 0.1)	0.3 (0.2, 0.5)
Never daily user	98.4 (98.0, 98.7)	99.1 (98.7, 99.4)	97.7 (97.1, 98.2)
Former occasional user	0.3 (0.2, 0.5)	0.3 (0.1, 0.6)	0.4 (0.2, 0.6)
Never user	98.1 (97.7, 98.5)	98.9 (98.4, 99.2)	97.4 (96.7, 97.9)

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

The estimated number of current users of smokeless tobacco in Viet Nam was 954,000. Of those, 267,900 were males and 686,100 were females (Table 5-5).

**Table 5-5: Number of adults ≥15 years, by detailed smokeless tobacco use status and gender – GATS Viet Nam, 2015.**

Smokeless Tobacco Use Status	Overall	Male	Female
	<i>Number in thousands</i>		
<b>Current smokeless tobacco user</b>	954.0	267.9	686.1
Daily user	694.5	151.9	542.6
Occasional user	259.5	116.0	143.5
Occasional user, formerly daily	66.9	8.1	58.8
Occasional user, never daily	192.6	107.9	84.7
<b>Non-user of smokeless tobacco</b>	66452.3	32391.8	34060.5
Former daily user	110.5	12.2	98.3
Never daily user	66341.8	32379.5	33962.2
Former occasional user	216.5	88.2	128.4
Never user	66125.2	32291.3	33833.9

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



### 5.3 Smoking status by demographic characteristics and type of smoked tobacco products

**Table 5-6: Percentage of adults ≥15 years who are current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Any smoked tobacco product		Any cigarette <sup>1</sup>		Type of Cigarette				Traditional bamboo waterpipe		Shisha waterpipe		Other smoked tobacco <sup>2</sup>	
					Manufactured		Hand-rolled							
<i>Percentage (95% CI)</i>														
<b>Overall</b>	22.5	(21.3, 23.8)	18.2	(17.0, 19.5)	17.9	(16.6, 19.1)	0.7	(0.5, 0.9)	6.7	(5.8, 7.7)	0.1	(0.0, 0.2)	0.4	(0.2, 0.6)
<i>Age (years)</i>														
15-24	12.6	(10.4, 15.2)	10.8	(8.8, 13.2)	10.8	(8.8, 13.2)	0.1	(0.0, 0.5)	3.6	(2.4, 5.4)	0.1	(0.0, 0.5)	0.2	(0.1, 0.7)
25-44	27.0	(25.0, 29.0)	22.4	(20.5, 24.4)	22.1	(20.2, 24.1)	0.7	(0.4, 1.2)	7.5	(6.4, 8.9)	0.1	(0.0, 0.4)	0.5	(0.3, 0.8)
45-64	26.9	(25.0, 28.8)	20.5	(18.8, 22.4)	20.1	(18.3, 21.9)	0.9	(0.5, 1.4)	8.9	(7.6, 10.4)	0.0		0.5	(0.2, 1.0)
65+	14.9	(12.7, 17.5)	11.2	(9.3, 13.5)	10.1	(8.3, 12.2)	1.6	(0.9, 2.6)	4.6	(3.2, 6.5)	0.1	(0.0, 0.8)	0.2	(0.1, 0.5)
<i>Residence</i>														
Urban	20.6	(19.1, 22.3)	18.8	(17.2, 20.5)	18.6	(17.1, 20.4)	0.4	(0.2, 0.7)	3.5	(2.8, 4.4)	0.2	(0.0, 0.5)	0.4	(0.2, 0.8)
Rural	23.5	(21.8, 25.3)	17.9	(16.3, 19.7)	17.4	(15.8, 19.2)	0.8	(0.6, 1.2)	8.3	(7.1, 9.8)	0.1	(0.0, 0.2)	0.4	(0.2, 0.7)
<i>Education level<sup>3</sup></i>														
Primary or less	24.7	(21.8, 27.7)	20.1	(17.4, 23.1)	18.7	(16.1, 21.6)	2.7	(1.8, 3.9)	5.5	(4.1, 7.5)	0.2	(0.1, 0.9)	1.2	(0.6, 2.3)
Lower secondary	27.9	(26.0, 29.9)	21.5	(19.6, 23.5)	21.1	(19.3, 23.1)	0.5	(0.3, 0.8)	9.3	(8.0, 10.8)	0.0	(0.0, 0.2)	0.3	(0.1, 0.6)
Upper secondary	26.7	(23.3, 30.4)	21.9	(18.9, 25.3)	21.8	(18.8, 25.2)	0.6	(0.2, 1.6)	8.8	(6.6, 11.5)	0.2	(0.0, 1.4)	0.2	(0.0, 1.4)
College or above	18.4	(15.9, 21.3)	16.6	(14.2, 19.3)	16.6	(14.2, 19.3)	0.1	(0.0, 0.5)	4.4	(3.1, 6.1)	0.0	-	0.2	(0.1, 0.4)
<i>Occupation</i>														
Senior officials	25.9	(17.6, 36.5)	20.6	(13.3, 30.5)	20.6	(13.3, 30.5)	0.0	-	8.7	(4.2, 17.3)	0.0	-	0.3	(0.0, 2.0)
Professionals	15.6	(11.5, 20.9)	14.2	(10.3, 19.3)	14.2	(10.3, 19.3)	0.2	(0.0, 1.3)	3.0	(1.3, 6.7)	0.0	-	0.2	(0.0, 1.3)
Associate professionals	17.3	(13.0, 22.6)	16.8	(12.6, 22.1)	16.8	(12.6, 22.1)	0.3	(0.0, 1.8)	1.8	(0.7, 4.2)	0.0	-	0.0	-
Elementary occupations	28.3	(26.2, 30.5)	22.1	(20.1, 24.3)	21.5	(19.5, 23.6)	1.0	(0.7, 1.5)	9.2	(7.8, 10.8)	0.0	(0.0, 0.3)	0.6	(0.3, 1.1)
Other occupations	29.1	(26.6, 31.9)	24.4	(21.9, 27.0)	24.2	(21.7, 26.8)	0.7	(0.3, 1.4)	8.4	(6.8, 10.4)	0.3	(0.1, 0.8)	0.4	(0.2, 0.9)

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

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

<sup>2</sup> Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 5-7: Percentage of males ≥15 years who are current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Any smoked tobacco product		Any cigarette <sup>1</sup>		Manufactured		Hand-rolled		Traditional bamboo waterpipe		Shisha waterpipe		Other smoked tobacco <sup>2</sup>	
	Percentage (95% CI)													
<b>Male</b>	45.3	(43.1, 47.5)	36.7	(34.4, 39.1)	36.1	(33.8, 38.4)	1.2	(0.9, 1.7)	13.7	(12.0, 15.6)	0.2	(0.1, 0.5)	0.6	(0.4, 1.0)
<i>Age (years)</i>														
15-24	24.3	(20.0, 29.1)	20.8	(16.8, 25.5)	20.8	(16.8, 25.5)	0.1	(0.0, 1.1)	7.1	(4.7, 10.5)	0.2	(0.1, 1.0)	0.3	(0.1, 1.1)
25-44	53.3	(50.1, 56.5)	44.5	(41.1, 48.0)	44	(40.7, 47.4)	1.3	(0.8, 2.2)	14.9	(12.6, 17.5)	0.3	(0.1, 0.9)	0.8	(0.4, 1.4)
45-64	55	(51.8, 58.2)	41.7	(38.4, 45.1)	40.9	(37.6, 44.2)	1.4	(0.8, 2.5)	18.8	(16.0, 21.8)	0	-	0.7	(0.4, 1.6)
65+	34.9	(29.8, 40.4)	26.5	(21.9, 31.6)	24.2	(19.8, 29.1)	3.4	(1.9, 5.9)	10.7	(7.5, 15.0)	0.3	(0.0, 2.1)	0.3	(0.1, 1.0)
<i>Residence</i>														
Urban	42.7	(39.8, 45.5)	38.7	(35.7, 41.8)	38.5	(35.5, 41.6)	0.8	(0.5, 1.5)	7.3	(5.8, 9.2)	0.3	(0.1, 1.0)	0.9	(0.5, 1.7)
Rural	46.7	(43.7, 49.6)	35.7	(32.6, 38.9)	34.9	(31.9, 38.1)	1.4	(0.9, 2.1)	16.8	(14.4, 19.5)	0.1	(0.0, 0.4)	0.5	(0.2, 0.9)
<i>Education level<sup>3</sup></i>														
Primary or less	60.7	(55.2, 65.9)	50.3	(44.3, 56.3)	47.3	(41.3, 53.3)	5.9	(3.8, 9.2)	13.7	(10.2, 18.3)	0.6	(0.1, 2.3)	2.0	(1.0, 3.9)
Lower secondary	57.5	(54.3, 60.5)	44.0	(40.6, 47.5)	43.5	(40.1, 46.8)	0.8	(0.5, 1.5)	19.4	(16.6, 22.4)	0.1	(0.0, 0.4)	0.6	(0.3, 1.2)
Upper secondary	47.2	(41.9, 52.7)	38.8	(33.7, 44.1)	38.6	(33.5, 43.9)	1.0	(0.4, 2.9)	15.5	(11.8, 20.1)	0.4	(0.1, 2.5)	0.4	(0.1, 2.5)
College or above	34.9	(30.5, 39.6)	31.5	(27.2, 36.2)	31.5	(27.2, 36.2)	0.2	(0.1, 0.9)	8.3	(5.9, 11.5)	0.0	-	0.3	(0.1, 0.8)
<i>Occupation</i>														
Senior officials	38	(26.4, 51.3)	30.2	(19.8, 43.1)	30.2	(19.8, 43.1)	0	-	12.7	(6.2, 24.5)	0	-	0.4	(0.1, 3.0)
Professionals	30.5	(22.8, 39.5)	27.8	(20.4, 36.7)	27.8	(20.4, 36.7)	0.4	(0.0, 2.5)	5.8	(2.6, 12.7)	0	-	0.4	(0.0, 2.5)
Associate professionals	36.6	(28.3, 45.8)	35.5	(27.3, 44.8)	35.5	(27.3, 44.8)	0.5	(0.1, 3.8)	3.7	(1.6, 8.7)	0	-	0	-
Elementary occupations	54.1	(50.7, 57.4)	42.4	(38.8, 46.1)	41.5	(38.0, 45.0)	1.7	(1.1, 2.5)	17.8	(15.1, 20.9)	0.1	(0.0, 0.6)	0.8	(0.4, 1.4)
Other occupations	51.9	(48.0, 55.8)	43.4	(39.5, 47.4)	43	(39.1, 47.0)	1.1	(0.5, 2.5)	15	(12.1, 18.4)	0.5	(0.2, 1.4)	0.7	(0.3, 1.7)

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

<sup>2</sup> Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 5-8** reports current use of various smoked tobacco products, by gender and selected demographic characteristics.

The overall prevalence rate of current smoking was highest among people aged 45-64 (26.9%) and 25-44 (27%) and was lowest among those aged 15-24 (12.6%) and those aged 65 years or older (14.9%). The pattern of current smoking by age was about the same for males as for the overall population. Among males, the prevalence rate of current smoking was highest among people aged 45-64 (55%) and 25-44 (53.3%) and lowest among those aged 15-24 (24.3%). Among females, the prevalence of current smoking was highest among those aged 45 years or older (1.9%) and lowest among those age 15-24 (0.5%).

For both males and females, the prevalence of current smokers was slightly higher in the rural strata, but no statistical significance was found (overall: 23.5% vs. 20.6%, respectively; males: 46.7% vs. 42.7%, respectively; females: 1.3% vs. 0.7%, respectively).

By education, for both males and females, the prevalence of current smoking was highest among people with primary education or less (males: 60.7%; females: 3.7%) and lowest among those with college degrees or higher (males: 34.9%; females: 0%).

By occupation, the prevalence of use of any smoked tobacco products was highest among those with elementary occupations (overall: 28.3%; males: 54.1%; females: 1.7%) and was lowest among those with professional occupations (overall: 15.6%; males: 30.5%; females: 0%).

The use of manufactured cigarettes was dominant as compared to other types of smoked tobacco (17.9%). With regard to the use of manufactured cigarettes across socioeconomic groups, the use pattern was similar to the use of any type of smoked tobacco. Prevalence of traditional bamboo water pipe was 6.7%. Prevalence of shisha use was 0.1%. The use of bamboo water pipe was significantly more common among those aged 45-64 (8.9%) than among those in other age groups (3.6-7.5%), lived in the rural areas (8.3% vs. 3.5%)

Among male smokers, the use of different types of smoked tobacco was similar to the figure for smokers overall. No remarkable difference between the genders regarding the use of smoked tobacco types (Table 5-6, Table 5-7 and Table 5-8)

**Table 5-8: Percentage of females ≥15 years who are current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Any smoked tobacco product		Any cigarette <sup>1</sup>		Manufactured		Hand-rolled		Traditional bamboo waterpipe		Shisha waterpipe		Other smoked tobacco <sup>2</sup>	
	Percentage	(95% CI)	Percentage	(95% CI)	Percentage	(95% CI)	Percentage	(95% CI)	Percentage	(95% CI)	Percentage	(95% CI)	Percentage	(95% CI)
<b>Female</b>	1.1	(0.7, 1.6)	0.8	(0.6, 1.2)	0.7	(0.5, 1.0)	0.2	(0.1, 0.4)	0.2	(0.0, 0.5)	0	-	0.2	(0.0, 0.7)
<i>Age (years)</i>														
15-24	0.5	(0.2, 1.7)	0.4	(0.1, 1.6)	0.4	(0.1, 1.6)	0	-	0	-	0	-	0.1	(0.0, 1.0)
25-44	0.7	(0.3, 1.4)	0.4	(0.1, 0.9)	0.2	(0.1, 0.5)	0.1	(0.0, 1.0)	0.2	(0.0, 0.8)	0	-	0.1	(0.0, 1.0)
45-64	1.9	(1.2, 3.0)	1.7	(1.1, 2.8)	1.6	(1.0, 2.5)	0.4	(0.1, 0.9)	0.1	(0.0, 0.7)	0	-	0.3	(0.1, 1.2)
65+	1.8	(1.0, 3.2)	1.2	(0.6, 2.4)	0.8	(0.4, 1.9)	0.4	(0.1, 1.2)	0.5	(0.2, 1.7)	0	-	0.1	(0.0, 0.5)
<i>Residence</i>														
Urban	0.7	(0.4, 1.1)	0.7	(0.4, 1.1)	0.7	(0.4, 1.1)	0	(0.0, 0.1)	0	-	0	-	0	-
Rural	1.3	(0.8, 2.1)	0.9	(0.6, 1.4)	0.7	(0.4, 1.1)	0.3	(0.1, 0.7)	0.2	(0.1, 0.7)	0	-	0.3	(0.1, 1.1)
<i>Education Level<sup>3</sup></i>														
Primary or less	3.7	(2.3, 5.8)	2.5	(1.5, 4.0)	2.0	(1.2, 3.2)	0.8	(0.4, 1.6)	0.8	(0.2, 2.4)	0.0	-	0.7	(0.2, 2.9)
Lower secondary	0.7	(0.4, 1.2)	0.7	(0.4, 1.2)	0.5	(0.3, 0.9)	0.1	(0.0, 0.7)	0.0	(0.0, 0.1)	0.0	-	0.0	-
Upper secondary	0.2	(0.0, 0.7)	0.2	(0.0, 0.7)	0.2	(0.0, 0.7)	0.0	-	0.0	-	0.0	-	0.0	-
College or above	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
<i>Occupation</i>														
Senior officials	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Professionals	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Associate professionals	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Elementary occupations	1.7	(1.0, 2.9)	1.2	(0.7, 2.0)	0.9	(0.6, 1.6)	0.3	(0.1, 0.9)	0.3	(0.1, 1.1)	0	-	0.4	(0.1, 1.7)
Other occupations	0.1	(0.0, 0.3)	0.1	(0.0, 0.3)	0.1	(0.0, 0.3)	0	(0.0, 0.2)	0	-	0	-	0	-

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

<sup>2</sup> Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 5-9** shows the estimated number of adults ≥15 years old who are current smokers of various tobacco products by selected sociodemographic characteristics.

**Table 5-10** shows the estimated number of adults ≥15 years old who are current smokers of various tobacco products by gender and selected sociodemographic characteristics.

**Table 5-9: Number of adults ≥15 years old who are current smokers of various smoked tobacco products, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette		Traditional bamboo waterpipe	Shisha waterpipe	Other smoked tobacco <sup>2</sup>
			Manufactured	Hand-rolled			
<i>Number in thousands</i>							
<b>Overall</b>	15602.4	12616.5	12364.4	479.7	4641.5	66.3	266.0
<i>Age (years)</i>							
15-24	2009.6	1718.9	1718.9	12.1	573.4	19.8	33.5
25-44	7828.7	6507.1	6411.8	210.9	2188.5	39.0	135.0
45-64	4804.7	3669.7	3586.2	156.1	1586.7	0.0	86.7
65+	959.4	720.8	647.5	100.6	292.8	7.5	10.8
<i>Residence</i>							
Urban	4826.9	4388.9	4363.2	96.1	815.6	35.7	102.8
Rural	10775.5	8227.5	8001.1	383.6	3825.8	30.6	163.2
<i>Education level<sup>3</sup></i>							
Primary or less	2681.0	2184.1	2028.9	290.6	601.4	23.1	127.0
Lower secondary	7196.6	5531.3	5443.3	120.8	2397.8	7.5	75.5
Upper secondary	2078.1	1705.9	1696.9	46.0	681.0	15.9	15.9
College or above	1631.6	1471.0	1471.0	10.3	387.8	0.0	14.1
<i>Occupation</i>							
Senior officials	161.0	127.9	127.9	0.0	54.0	0.0	1.8
Professionals	333.8	304.4	304.4	3.9	63.7	0.0	3.9
Associate professionals	427.0	414.7	414.7	6.4	43.7	0.0	0.0
Elementary occupations	8576.7	6697.8	6517.7	298.9	2783.3	13.6	179.6
Other occupations	4492.6	3755.9	3723.1	100.5	1294.8	43.7	61.2

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

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

<sup>2</sup> Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 5-10: Number of adults ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette		Traditional bamboo waterpipe	Shisha waterpipe	Other smoked tobacco <sup>2</sup>
			Manufactured	Hand-rolled			
<i>Number in thousands</i>							
<b>Male</b>	15213.5	12322.3	12121.7	409.4	4586.8	66.3	207.0
<i>Age (years)</i>							
15-24	1969.7	1689.5	1689.5	12.1	573.4	19.8	22.9
25-44	7730.5	6454.8	6380.4	190.1	2164.1	39.0	113.6
45-64	4624.6	3504.5	3436.4	121.7	1577.0	0.0	62.6
65+	888.7	673.4	615.3	85.5	272.3	7.5	7.9
<i>Residence</i>							
Urban	4742.3	4304.3	4280.4	94.3	815.6	35.7	102.8
Rural	10471.2	8018.1	7841.3	315.1	3771.1	30.6	104.2
<i>Education level<sup>3</sup></i>							
Primary or less	2428.4	2013.2	1891.7	238.0	549.2	23.1	78.7
Lower secondary	7106.1	5443.2	5373.0	103.0	2395.3	7.5	75.5
Upper secondary	2072.2	1700.0	1691.0	46.0	681.0	15.9	15.9
College or above	1631.6	1471.0	1471.0	10.3	387.8	0.0	14.1
<i>Occupation</i>							
Senior officials	161.0	127.9	127.9	0.0	54.0	0.0	1.8
Professionals	333.8	304.4	304.4	3.9	63.7	0.0	3.9
Associate professionals	427.0	414.7	414.7	6.4	43.7	0.0	0.0
Elementary occupations	8317.0	6521.9	6375.9	255.6	2739.6	13.6	120.6
Other occupations	4484.1	3747.4	3716.7	98.4	1294.8	43.7	61.2
<b>Female</b>	388.9	294.2	242.7	70.4	54.7	0.0	59.0
<i>Age (years)</i>							
15-24	39.9	29.3	29.3	0.0	0.0	0.0	10.6
25-44	98.2	52.3	31.4	20.9	24.5	0.0	21.5
45-64	180.1	165.2	149.7	34.4	9.7	0.0	24.1
65+	70.8	47.3	32.2	15.1	20.5	0.0	2.9
<i>Residence</i>							
Urban	84.7	84.7	82.8	1.8	0.0	0.0	0.0
Rural	304.3	209.5	159.8	68.6	54.7	0.0	59.0
<i>Education level<sup>3</sup></i>							
Primary or less	252.6	170.9	137.2	52.5	52.2	0.0	48.4
Lower secondary	90.5	88.1	70.2	17.8	2.4	0.0	0.0
Upper secondary	5.9	5.9	5.9	0.0	0.0	0.0	0.0
College or above	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Occupation</i>							
Senior officials	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professionals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Associate professionals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Elementary occupations	259.7	175.9	141.7	43.3	43.6	0.0	59.0
Other occupations	8.6	8.6	6.5	2.1	0.0	0.0	0.0

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

<sup>2</sup> Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

## Comparison between Results of GATS 2010 and Results of GATS 2015

**Table 5-11** shows that overall, in comparison with GATS 2010, GATS 2015 found that the use any type of cigarette significantly declined by 8.4%. Big changes were found for hand-rolled cigarettes (down by 38.3%). However, stratified analysis for each gender found only a significant decline in the use of hand-rolled cigarettes among male smokers. The use of hand-rolled cigarettes decreased remarkably (77.7%) among members of the youngest group aged 15-24 years and those in the 45-64 age group (50.7%) while use of manufactured cigarettes significantly decreased only among the 25-44 age group (11.1%). The use of cigarettes dropped significantly in urban areas (14.7%) while there was no significant decrease in rural areas. Use of manufactured cigarettes significantly decreased among those at the lower secondary education level.

**Table 5-11: Relative change in percentage of adults ≥15 years old who are current smokers of various smoked tobacco products between 2010 and 2015, by selected demographic characteristics – GATS Viet Nam.**

Demographic characteristics	Any smoked tobacco product	Type of Cigarette				Other smoked tobacco <sup>3</sup>
		Any cigarette <sup>1</sup>	Manufactured Percentage	Hand-rolled	Waterpipes <sup>2</sup>	
<b>Overall</b>	-5.3	-8.4*	-8.4*	-38.3*	5.1	170.0
<i>Gender</i>						
Male	-4.4	-7.5	-7.6	-35.2*	5.4	256.4
Female	-24.5	-30.1	-30.0	-51.4	5.2	46.1
<i>Age (years)</i>						
15-24	-5.3	-9.7	-9.7	-77.7**	23.5	
25-44	-6.3	-10.6*	-11.1*	-32.3	4.9	166.5
45-64	-9.4*	-9.8	-8.7	-50.7***	-5.9	107.1
65+	-0.8	1.8	4.6	-19.0	-0.9	4.2
<i>Residence</i>						
Urban	-11.4*	-14.9**	-14.7**	-1.7	40.7	322.7
Rural	-2.1	-5.3	-5.5	-41.7*	2.9	123.6
<i>Education level<sup>4</sup></i>						
Primary or less	1.5	0.0	0.0	-19.9	9.5	203.7
Lower secondary	-6.3	-10.3	-10.6*	-53.2**	-4.7	245.1
Upper secondary	-2.4	-8.8	-9.3		31.1	-23.8
College or above	-14.5	-17.0	-17.0	142.3	60.9	25.1

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

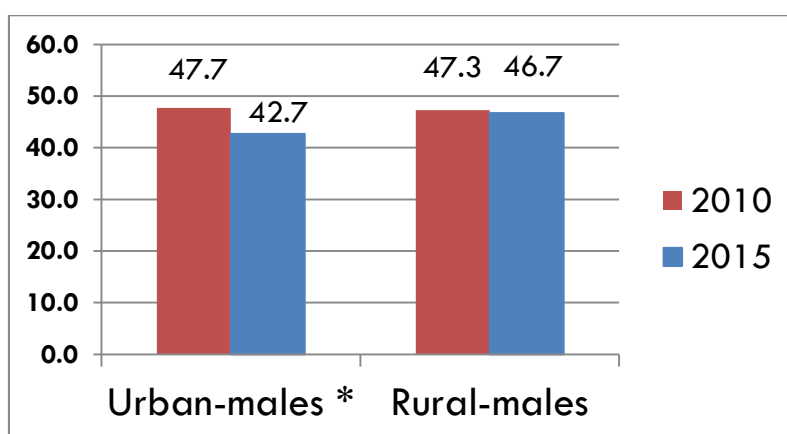
<sup>1</sup> Includes manufactured cigarettes and hand-rolled cigarettes.

<sup>2</sup> Includes traditional bamboo waterpipes and shisha waterpipes.

<sup>3</sup> Includes pipes, cigars/cheroots/cigarillos, and other.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001



\* Statistically significant at P<0.05

Figure 1 . Prevalence of cigarette smoking in 2010 and 2015 among men in urban and rural areas.

Figure 1 shows that prevalence of cigarette smoking among men in urban areas in 2015 decreased by 5 percentage points from the 2010 level. This difference was significant. Meanwhile the difference between 2010 and 2015 in rural areas was not significant.

#### 5.4 Frequency of tobacco smoking

**Table 5-12: Percentage distribution of adults ≥15 years, by smoking frequency and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Smoking Frequency						Total
	Daily		Occasional <sup>1</sup>		Non-smoker		
	<i>Percentage (95% CI)</i>						
<b>Overall</b>	19.2	(18.0, 20.5)	3.3	(2.9, 3.8)	77.5	(76.2, 78.7)	100
<i>Age (years)</i>							
15-24	9.7	(7.8, 12.1)	2.9	(1.9, 4.4)	87.4	(84.8, 89.6)	100
25-44	22.6	(20.8, 24.5)	4.4	(3.6, 5.3)	73.0	(71.0, 75.0)	100
45-64	24.4	(22.6, 26.3)	2.5	(1.9, 3.1)	73.1	(71.2, 75.0)	100
65+	13.1	(11.0, 15.6)	1.8	(1.2, 2.8)	85.1	(82.5, 87.3)	100
<i>Residence</i>							
Urban	17.2	(15.8, 18.7)	3.4	(2.8, 4.2)	79.4	(77.7, 80.9)	100
Rural	20.2	(18.6, 22.0)	3.3	(2.7, 4.0)	76.5	(74.7, 78.2)	100
<i>Education level<sup>2</sup></i>							
Primary or less	22.8	(20.1, 25.7)	1.9	(1.2, 3.0)	75.3	(72.3, 78.2)	100
Lower secondary	24.4	(22.6, 26.4)	3.5	(2.8, 4.3)	72.1	(70.1, 74.0)	100
Upper secondary	22.6	(19.4, 26.2)	4.1	(2.7, 6.0)	73.3	(69.6, 76.7)	100
College or above	13.8	(11.6, 16.4)	4.6	(3.3, 6.2)	81.6	(78.7, 84.1)	100
<i>Occupation</i>							
Senior officials	16.6	(9.9, 26.5)	9.3	(4.8, 17.4)	74.1	(63.5, 82.4)	100
Professionals	12.0	(8.4, 16.8)	3.6	(1.8, 6.9)	84.4	(79.1, 88.5)	100
Associate professionals	13.1	(9.2, 18.3)	4.2	(2.6, 6.9)	82.7	(77.4, 87.0)	100
Elementary occupations	24.9	(22.9, 27.0)	3.4	(2.8, 4.2)	71.7	(69.5, 73.8)	100
Other occupations	24.3	(22.0, 26.8)	4.8	(3.6, 6.4)	70.9	(68.1, 73.4)	100

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

<sup>2</sup> Education level is reported only among respondents 25+ years old.



**Table 5-12** shows that daily smoking was more prevalent among age groups 25-44 years (22.6%) and 45-64 years (24.4%) than among age groups 15-24 years (9.7%) and 65 years or older (13.1%). Prevalence was also higher in rural areas (20.2%) than in urban areas (17.2%); among those with low levels of education (22.8% of those with a primary education or less compared with 24.4% (lower secondary), 22.6% (upper secondary) and 13.8% (college or above); and among those who were not professionals (24.9% among those who had elementary occupations compared with 12.0% of professionals, 13.1% of associate professionals, and 16.6% of senior officials). This pattern of smoking frequency was true for both males and females in the stratified analyses (**Table 5-13**).

**Table 5-13: Percentage distribution of adults ≥15 years, by smoking frequency, gender, and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Smoking frequency						Total
	Daily		Occasional <sup>1</sup>		Non-smoker		
	<i>Percentage (95% CI)</i>						
<b>Male</b>	38.7	(36.6, 40.9)	6.6	(5.7, 7.7)	54.7	(52.5, 56.9)	100
<i>Age (years)</i>							
15-24	18.7	(14.9, 23.2)	5.6	(3.7, 8.4)	75.7	(70.9, 80.0)	100
25-44	44.8	(41.6, 48.0)	8.6	(7.0, 10.4)	46.7	(43.5, 49.9)	100
45-64	50.0	(46.8, 53.2)	5.0	(3.9, 6.4)	45.0	(41.8, 48.2)	100
65+	31.0	(26.1, 36.4)	3.9	(2.4, 6.2)	65.1	(59.6, 70.2)	100
<i>Residence</i>							
Urban	35.7	(33.1, 38.3)	7.0	(5.7, 8.6)	57.3	(54.5, 60.2)	100
Rural	40.3	(37.3, 43.2)	6.4	(5.2, 7.8)	53.3	(50.4, 56.3)	100
<i>Education level<sup>2</sup></i>							
Primary or less	56.3	(51.0, 61.5)	4.4	(2.6, 7.3)	39.3	(34.1, 44.8)	100
Lower secondary	50.5	(47.3, 53.8)	6.9	(5.6, 8.6)	42.5	(39.5, 45.7)	100
Upper secondary	40.0	(34.8, 45.4)	7.2	(4.9, 10.6)	52.8	(47.3, 58.1)	100
College or above	26.3	(22.3, 30.7)	8.7	(6.3, 11.7)	65.1	(60.4, 69.5)	100
<i>Occupation</i>							
Senior officials	24.4	(14.8, 37.4)	13.7	(7.0, 24.9)	62.0	(48.7, 73.6)	100
Professionals	23.5	(16.7, 32.0)	7.0	(3.6, 13.3)	69.5	(60.5, 77.2)	100
Associate professionals	27.6	(19.9, 36.9)	9.0	(5.5, 14.3)	63.4	(54.2, 71.7)	100
Elementary occupations	47.7	(44.3, 51.1)	6.4	(5.1, 7.9)	45.9	(42.6, 49.3)	100
Other occupations	43.4	(39.6, 47.2)	8.6	(6.5, 11.2)	48.1	(44.2, 52.0)	100
<b>Female</b>	0.9	(0.6, 1.3)	0.2	(0.1, 0.4)	98.9	(98.4, 99.3)	100
<i>Age (years)</i>							
15-24	0.4	(0.1, 1.7)	0.1	(0.0, 0.8)	99.5	(98.3, 99.8)	100
25-44	0.4	(0.2, 1.1)	0.2	(0.1, 0.6)	99.3	(98.6, 99.7)	100
45-64	1.7	(1.0, 2.8)	0.2	(0.1, 0.7)	98.1	(97.0, 98.8)	100
65+	1.4	(0.7, 2.5)	0.5	(0.1, 1.8)	98.2	(96.8, 99.0)	100
<i>Residence</i>							
Urban	0.5	(0.3, 0.9)	0.2	(0.1, 0.4)	99.3	(98.9, 99.6)	100
Rural	1.0	(0.6, 1.8)	0.3	(0.1, 0.6)	98.7	(97.9, 99.2)	100
<i>Education level<sup>2</sup></i>							
Primary or less	3.3	(2.0, 5.4)	0.4	(0.1, 1.0)	96.3	(94.2, 97.7)	100
Lower secondary	0.3	(0.2, 0.7)	0.3	(0.1, 0.8)	99.3	(98.8, 99.6)	100
Upper secondary	0.2	(0.0, 0.7)	0.0	-	99.8	(99.3, 100)	100
College or above	0.0	-	0.0	-	100.0	-	100
<i>Occupation</i>							
Senior officials	0.0	-	0.0	-	100.0	-	100
Professionals	0.0	-	0.0	-	100.0	-	100
Associate professionals	0.0	-	0.0	-	100.0	-	100
Elementary occupations	1.4	(0.8, 2.5)	0.4	(0.1, 0.8)	98.3	(97.1, 99.0)	100
Other occupations	0.1	(0.0, 0.3)	0.0	(0.0, 0.2)	99.9	(99.7, 100)	100

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

<sup>2</sup> Education level is reported only among respondents 25+ years old.

## 5.6 Number of cigarettes smoked per day

**Table 5-14** shows the average number of cigarettes smoked per day and the distribution of daily smokers according to the number of cigarettes smoked per day by socioeconomic status.

Overall, the average number of cigarettes smoked per day among daily smokers was 13.7. Those who smoked 20 cigarettes per day or more accounted for the highest proportion (37.6%), followed by those who smoked 10 to 14 cigarettes per day (30.6%), those who smoked 5-9 cigarettes per day (15.8%). Those who smoked four cigarettes or fewer accounted for only 8.3% and those who smoked 15-19 cigarettes per days, only 7.7%.

The average number of cigarettes smoked per day by male daily smokers was 13.8, which is significantly higher than the average number for female daily smokers (10.5). Although the proportion of male smokers of 20 and more cigarettes per day and those who smoked 10 to 14 cigarettes per day dominated (37.9% and 30.7%, respectively), female daily smokers were evenly distributed into four groups: smoked less than five cigarettes per day (21.4%), smoked 5-9 cigarettes per day (25.2%), smoked 10-14 cigarettes per day (28.3%) and smoked 20 and more cigarettes per day (25.1%).

With regard to education levels, those smokers who had high education levels smoked fewer cigarettes than smokers with low education levels; the most significant difference was found between those with college level and those with primary level or less (12 cigarettes vs. 14.6 cigarettes). Among smokers with college level education, the most common number of cigarettes smoked a day was 10 to 14 cigarettes.

Smokers who had a professional or associate professional occupation reported smoking less than smokers with elementary occupations or other occupations. The difference was found to be significant only between associate professionals and elementary occupations (10.8 cigarettes vs. 14 cigarettes) and between associate professionals and other occupations (10.8 cigarettes vs. 14.2 cigarettes).

The distribution of those in different age groups and in urban and rural areas was similar to the distribution of daily smokers. No significant difference was found among age groups or between urban and rural areas.

**Table 5-14: Average number and percentage distribution of cigarettes smoked per day among daily cigarette smokers ≥15 years, by gender and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Average number of cigarettes smoked per day <sup>1</sup>		Distribution of number of cigarettes smoked on average per day <sup>1</sup>										
			<5		5-9		10-14		15-19		≥20		Total
	<i>Mean (95% CI)</i>		<i>Percentage (95% CI)</i>										
<b>Overall</b>	13.7	(13.2, 14.2)	8.3	(6.6, 10.3)	15.8	(13.5, 18.4)	30.6	(27.6, 33.8)	7.7	(6.1, 9.7)	37.6	(34.4, 41.0)	100
<i>Gender</i>													
Male	13.8	(13.3, 14.3)	8.0	(6.3, 10.0)	15.6	(13.3, 18.1)	30.7	(27.7, 33.8)	7.9	(6.2, 9.9)	37.9	(34.7, 41.3)	100
Female	10.5	(8.2, 12.7)	21.4	(10.7, 38.3)	25.2	(11.2, 47.3)	28.3	(15.2, 46.5)	0.0	-	25.1	(11.7, 45.8)	100
<i>Age (years)</i>													100
15-24	12.8	(10.8, 14.7)	8.6	(4.3, 16.3)	22.5	(13.6, 34.7)	29.1	(19.8, 40.6)	6.6	(2.6, 15.8)	33.3	(21.8, 47.2)	100
25-44	14.0	(13.3, 14.7)	8.1	(5.7, 11.4)	13.9	(10.9, 17.5)	31.1	(26.5, 36.0)	8.7	(6.5, 11.7)	38.2	(33.8, 42.9)	100
45-64	14.0	(13.2, 14.8)	7.8	(5.6, 10.8)	15.4	(12.3, 19.2)	31.2	(26.7, 35.9)	5.4	(3.7, 7.9)	40.1	(35.2, 45.2)	100
65+	12.2	(10.9, 13.5)	11.3	(6.5, 19.0)	19.7	(12.1, 30.4)	26.8	(18.4, 37.2)	13.2	(6.9, 23.8)	28.9	(20.4, 39.2)	100
<i>Residence</i>													
Urban	13.9	(13.2, 14.5)	6.9	(5.1, 9.2)	14.3	(11.6, 17.3)	34.2	(30.0, 38.5)	7.4	(5.4, 10.0)	37.3	(33.1, 41.8)	100
Rural	13.7	(13.0, 14.4)	9.0	(6.7, 11.9)	16.6	(13.5, 20.3)	28.7	(24.8, 33.0)	7.9	(5.7, 10.7)	37.8	(33.5, 42.4)	100
<i>Education level<sup>2</sup></i>													
Primary or less	14.6	(13.4, 15.7)	9.1	(5.7, 14.2)	11.8	(8.1, 16.8)	29.2	(23.2, 36.0)	9.4	(6.0, 14.3)	40.5	(33.5, 47.9)	100
Lower secondary	14.1	(13.4, 14.8)	6.8	(4.7, 9.6)	15.6	(12.6, 19.1)	30.2	(26.0, 34.8)	6.7	(4.8, 9.5)	40.7	(36.2, 45.3)	100
Upper secondary	13.7	(12.2, 15.2)	8.6	(4.0, 17.3)	17.1	(10.9, 25.8)	30.2	(22.4, 39.4)	7.0	(3.6, 12.9)	37.2	(29.2, 45.9)	100
College or above	12.0	(10.9, 13.2)	12.1	(7.2, 19.6)	14.0	(8.8, 21.6)	36.9	(27.9, 47.0)	11.0	(6.1, 19.0)	25.9	(18.4, 35.3)	100
<i>Occupation</i>													
Senior officials	~	~	~	~	~	~	~	~	~	~	~	~	100
Professionals	12.7	(10.3, 15.0)	11.3	(3.8, 29.2)	12.8	(4.1, 33.1)	36.5	(20.5, 56.1)	5.8	(1.4, 21.2)	33.7	(19.4, 51.6)	100
Associate professionals	10.8	(9.0, 12.5)	7.1	(2.1, 21.2)	30.0	(15.5, 50.2)	36.2	(19.3, 57.4)	12.4	(5.3, 26.4)	14.3	(6.4, 28.8)	100
Elementary occupations	14.0	(13.3, 14.8)	7.6	(5.4, 10.5)	16.3	(13.0, 20.2)	30.1	(26.2, 34.4)	6.5	(4.7, 9.0)	39.5	(34.8, 44.3)	100
Other occupations	14.2	(13.4, 15.1)	7.4	(4.6, 11.6)	11.5	(8.2, 15.8)	30.6	(25.4, 36.4)	9.9	(6.7, 14.3)	40.7	(34.9, 46.7)	100

<sup>1</sup> Among daily cigarette smokers. Cigarettes include manufactured and hand-rolled.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Number of cigarettes smoked per day - Comparison between GATS 2010 and GATS 2015**

**Table 5-15: Relative change in average number and percentage distribution of cigarettes smoked per day among daily cigarette smokers ≥15 years, by gender and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Number of cigarettes smoked on average per day <sup>1</sup>							
	2010				Relative change			
	Average number	<10	10-19	20+	Average number	<10	10-19	20+
	<i>Mean (95% CI)</i>	<i>Percentage (95% CI)</i>			<i>Mean (95% CI)</i>	<i>Percentage (95% CI)</i>		
<b>Overall</b>	13.5 (12.6, 14.4)	31.0 (28.0, 34.1)	39.7 (36.5, 43.0)	29.3 (26.3, 32.4)	1.7	-22.4***	-3.6	28.6**
<i>Gender</i>								
Male	13.6 (12.7, 14.5)	30.3 (27.3, 33.5)	40.2 (36.9, 43.5)	29.5 (26.5, 32.7)	1.5	-22.3***	-4.1	28.5**
Female	10.9 (9.2, 12.5)	50.0 (38.0, 62.1)	27.5 (18.0, 39.5)	22.5 (13.0, 36.2)	-3.8	-6.8	3.2	11.2
<i>Age (years)</i>								
15-24	11.0 (8.2, 13.8)	40.5 (30.5, 51.3)	45.5 (35.1, 56.3)	14.0 (7.9, 23.5)	16.1	-23.3	-21.7	137.8
25-44	13.7 (12.6, 14.9)	25.9 (22.1, 30.0)	42.9 (38.4, 47.4)	31.3 (27.3, 35.6)	1.9	-15.1	-7.1	22.3*
45-64	14.8 (13.3, 16.2)	32.4 (27.7, 37.4)	33.5 (29.1, 38.2)	34.1 (29.4, 39.1)	-5.2	-28.2***	9.2	17.7
65+	10.7 (8.7, 12.7)	51.0 (39.6, 62.4)	26.9 (18.1, 38.0)	22.1 (14.0, 33.0)	14.1	-39.2**	48.8	31.2
<i>Residence</i>								
Urban	13.2 (12.3, 14.1)	29.2 (25.5, 33.2)	40.8 (36.8, 45.0)	30.0 (26.3, 33.9)	4.8	-27.6***	1.7	24.5*
Rural	13.7 (12.4, 14.9)	31.9 (27.9, 36.3)	39.2 (34.8, 43.7)	28.9 (24.9, 33.3)	0.0	-19.8*	-6.6	30.8*
<i>Education level<sup>2</sup></i>								
Primary or less	15.6 (13.4, 17.7)	27.6 (22.6, 33.3)	36.0 (29.9, 42.7)	36.3 (29.6, 43.6)	-6.2	-24.4	7.0	11.6
Lower secondary	13.3 (12.3, 14.3)	29.6 (25.3, 34.2)	39.8 (35.5, 44.3)	30.6 (26.5, 35.0)	6.0	-24.4**	-7.2	32.9**
Upper secondary	14.0 (12.3, 15.8)	29.5 (22.2, 38.1)	37.2 (28.9, 46.2)	33.3 (25.8, 41.8)	-2.3	-13.1	0.0	11.6
College or above	12.1 (10.3, 13.9)	36.8 (28.4, 46.1)	45.8 (37.6, 54.3)	17.4 (11.8, 24.8)	-0.6	-28.9*	4.5	49.3

<sup>1</sup> Among daily cigarette smokers. Cigarettes include manufactured and hand-rolled.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Overall, the average number of cigarettes smoked per day in 2015 did not significantly decline from 2010. GATS 2015 found a significantly lower proportion of smokers who smoked fewer than 10 cigarettes per day (relative change, 22.4%) and a significantly higher proportion of those who smoked more than 20 cigarettes per day (relative change, 28.6%). The pattern of changes was similar to the overall picture for male smokers. There was no significant difference between 2010 and 2015 in the distribution of female smokers by number of cigarettes smoked per day.

## 5.7 Age at smoking initiation

**Table 5-16: Average and percentage distribution of age at daily smoking initiation among ever daily smokers 20-34 years, by gender and residence – GATS Viet Nam, 2015.**

Demographic characteristics	Average age at daily smoking initiation (years) <sup>1</sup>		Distribution of age at daily smoking initiation (years) <sup>1</sup>								
			<15		15-16		17-19		20+		Total
	<i>Mean (95% CI)</i>		<i>Percentage (95% CI)</i>								
<b>Overall</b>	18.8	(18.4, 19.2)	6.2	(3.9, 9.6)	15.3	(11.8, 19.6)	39.0	(33.7, 44.6)	39.5	(34.0, 45.3)	100
<i>Gender</i>											
Male	18.8	(18.4, 19.2)	6.0	(3.8, 9.3)	15.0	(11.5, 19.3)	39.1	(33.8, 44.8)	39.9	(34.3, 45.7)	100
Female	~	~	~	~	~	~	~	~	~	~	100
<i>Residence</i>											
Urban	18.5	(17.9, 19.1)	8.3	(4.7, 14.1)	18.0	(12.5, 25.3)	32.7	(26.1, 40.1)	41.0	(33.4, 49.1)	100
Rural	18.9	(18.3, 19.4)	5.2	(2.7, 9.9)	14.1	(9.9, 19.7)	41.9	(34.9, 49.2)	38.8	(31.8, 46.4)	100

<sup>1</sup> Among respondents 20-34 years of age who are ever daily smokers.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 5-16** presents the average and percentage distribution of age (years) at smoking initiation among ever daily smokers aged 20 to 34. The mean age of initiation of daily smoking was 18.8.

The highest proportion was smokers who initiated daily smoking at age 20 or older (39.5%), followed by those who began smoking at age 17 to 19 (39%). The lowest proportion started their daily smoking under the age of 15 (6.2%). Because the prevalence of smoking among females aged 20-34 years was low, the estimated percentage distribution of ever daily smokers by age at daily smoking initiation was based on fewer than 25 unweighted cases, so the data are omitted from the table. There was no difference in the pattern of age at smoking initiation by urban or rural residence.

**Age at smoking initiation- Comparison between GATS 2010 and GATS 2015**

**Table 5-17: Relative change in average and percentage distribution of age at daily smoking initiation among ever daily smokers 20-34 years, by gender and residence – GATS Viet Nam, 2015.**

Demographic characteristics	2010					Relative change				
	Average age	<15	15-16	17-19	20+	Average age	<15	15-16	17-19	20+
	Mean (95% CI)	Percentage (95% CI)				Mean (95% CI)	Percentage (95% CI)			
<b>Overall</b>	19.0 (18.7, 19.4)	6.8 (4.8, 9.4)	13.3 (10.1, 17.3)	35.9 (31.3, 40.9)	44.0 (39.4, 48.7)	-1.4	-8.8	15.4	8.5	-10.2
<i>Gender</i>										
Male	19.1 (18.7, 19.4)	6.5 (4.6, 9.2)	13.0 (9.9, 17.0)	36.4 (31.7, 41.3)	44.1 (39.5, 48.8)	-1.3	-8.2	15.2	7.7	-9.6
Female	~	~	~	~	~	-	-	-	-	-
<i>Residence</i>										
Urban	19.1 (18.6, 19.5)	7.2 (4.2, 12.2)	11.8 (8.3, 16.5)	35.5 (29.2, 42.4)	45.4 (39.1, 51.9)	-2.9	14.3	52.9	-8	-9.7
Rural	19.0 (18.6, 19.5)	6.6 (4.3, 10.0)	13.9 (9.7, 19.5)	36.1 (30.1, 42.6)	43.4 (37.5, 49.5)	-0.7	-20.5	1.2	15.9	-10.5

<sup>1</sup> Among respondents 20-34 years of age who are ever daily smokers.  
\* p<0.05, \*\* p<0.01, \*\*\* p<0.001  
~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 5-15** shows that there is no difference between GATS 2010 and GATS 2015 regarding the average age of daily smoking initiation or the distribution of age at daily smoking initiation.

## 5.8 Former daily smoking prevalence and quit ratio

**Table 5-18: Percentage of all adults, ever daily smokers, and ever smokers ≥15 years who are former smokers, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Former daily smokers <sup>1</sup> (among all adults)		Former smokers <sup>1</sup> (among ever daily smokers) <sup>2</sup>		Former smokers <sup>1</sup> (among ever smokers) <sup>3</sup>	
	Percentage (95% CI)					
<b>Overall</b>	6.7	(6.1, 7.3)	24.6	(22.6, 26.8)	29.0	(26.9, 31.3)
<i>Gender</i>						
Male	13.1	(11.9, 14.4)	24.2	(22.1, 26.4)	28.5	(26.3, 30.8)
Female	0.6	(0.4, 0.9)	39.8	(29.2, 51.4)	44.9	(34.4, 55.8)
<i>Age (years)</i>						
15-24	0.6	(0.3, 1.3)	5.6	(2.6, 11.6)	12.4	(7.6, 19.6)
25-44	4.9	(4.1, 5.8)	17.0	(14.3, 20.0)	22.2	(19.4, 25.3)
45-64	11.8	(10.4, 13.2)	31.4	(28.2, 34.8)	35.6	(32.5, 38.9)
65+	15.4	(13.1, 18.2)	52.1	(45.7, 58.4)	55.5	(49.5, 61.4)
<i>Residence</i>						
Urban	7.2	(6.4, 8.0)	28.1	(25.2, 31.1)	32.5	(29.4, 35.7)
Rural	6.4	(5.7, 7.3)	23.0	(20.3, 25.9)	27.3	(24.6, 30.3)
<i>Education level<sup>4</sup></i>						
Primary or less	6.1	(4.8, 7.6)	20.7	(16.6, 25.4)	24.2	(20.1, 28.9)
Lower secondary	9.2	(8.2, 10.5)	26.4	(23.5, 29.5)	29.5	(26.6, 32.5)
Upper secondary	9.0	(7.2, 11.3)	27.3	(21.8, 33.7)	32.6	(27.0, 38.8)
College or above	8.6	(7.1, 10.5)	35.1	(29.4, 41.3)	42.6	(37.1, 48.3)
<i>Occupation</i>						
Senior officials	15.9	(9.7, 25.1)	39.3	(25.2, 55.4)	44.7	(30.9, 59.5)
Professionals	4.3	(2.5, 7.4)	25.1	(15.0, 38.7)	38.8	(27.5, 51.6)
Associate professionals	8.2	(5.1, 13.0)	35.5	(23.3, 49.9)	39.0	(27.9, 51.3)
Elementary occupations	6.5	(5.6, 7.5)	20.0	(17.3, 23.0)	24.0	(21.3, 26.9)
Other occupations	6.8	(5.6, 8.2)	20.7	(17.2, 24.6)	24.8	(21.1, 28.8)

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

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

<sup>3</sup> Also known as the quit ratio for smoking.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

**Table 5-18** presents data on the percentage of former smokers among all adults, percentage of former smokers among those who had ever smoked daily (the quit ratio for daily smoking) and the percentage of former smokers among ever smokers (the quit ratio for smoking). This is a critical indicator of the success of efforts to encourage cessation among established tobacco smokers. Among adults aged 15 or older, 6.7% were former smokers. The quit ratio for ever daily smoker was 24.6%, and the quit ratio for ever smokers was 29%.

Among those who had ever smoked, females (44.9%) were more likely than males (28.5%) to be former smokers.

All three measures increased with age. For example, the percentage of ever daily smokers who were former smokers was 12.4% for 15-24 year olds, 22.2% for 25-44 year olds, 35.6% for 45-64 year olds, and 55.5% for those aged 65 or older.

Cessation was more common among those with high levels of education. However, significant differences were found only between former daily smokers with the highest education level and former daily smokers with the lowest education level. For example, the quit ratio for ever daily smokers among those who had completed college was 35.1% (95% CI: 29.4%-41.3%) and among those with primary education or less was 20.7% (95% CI: 16.6-24.5%).

There were no significant differences in any of the three measures of cessation between urban and rural residents or among people with different levels of occupations.

**Former smoking prevalence – Comparison between GATS 2010 and GATS 2015**

**Table 5-19: Percentage of all adults, ever daily smokers, and ever smokers ≥15 years who are former smokers, by selected demographic characteristics – GATS Viet Nam, relative change between 2015 and 2010.**

Characteristic	Former daily smokers (among all adults) <sup>1</sup>			Former daily smokers (among ever daily smokers) <sup>1,2</sup>			Former smokers <sup>1</sup> (among ever smokers) <sup>3</sup>		
	2010	2015	Relative change	2010	2015	Relative change	2010	2015	Relative change
	Percentage (95% CI)		Percentage	Percentage (95% CI)		Percentage	Percentage (95% CI)		Percentage
<b>Overall</b>	6.4 (5.8, 7.1)	6.7 (6.1, 7.3)	3.5	23.5 (21.4, 25.7)	24.6 (22.6, 26.8)	4.8	29.3 (27.2, 31.4)	29.0 (26.9, 31.3)	-0.8
<i>Gender</i>									
Male	12.7 (11.5, 14.0)	13.1 (11.9, 14.4)	3.2	23.3 (21.2, 25.5)	24.2 (22.1, 26.4)	3.7	28.8 (26.7, 31.0)	28.5 (26.3, 30.8)	-1.0
Female	0.5 (0.3, 0.8)	0.6 (0.4, 0.9)	17.9	28.6 (18.8, 40.9)	39.8 (29.2, 51.4)	39.1	41.6 (30.9, 53.1)	44.9 (34.4, 55.8)	7.9
<i>Age (years)</i>									
15-24	0.7 (0.3, 1.5)	0.6 (0.3, 1.3)	-10.8	6.4 (3.0, 13.4)	5.6 (2.6, 11.6)	-13.3	17.5 (12.5, 23.9)	12.4 (7.6, 19.6)	-29.0
25-44	5.9 (5.0, 6.9)	4.9 (4.1, 5.8)	-16.4	18.8 (16.2, 21.6)	17.0 (14.3, 20.0)	-9.6	25.3 (22.7, 28.2)	22.2 (19.4, 25.3)	-12.2
45-64	10.5 (9.1, 12.0)	11.8 (10.4, 13.2)	12.3	27.3 (24.1, 30.8)	31.4 (28.2, 34.8)	14.9	32.5 (29.3, 35.8)	35.6 (32.5, 38.9)	9.6
65+	15.3 (12.7, 18.3)	15.4 (13.1, 18.2)	0.9	52.5 (45.9, 59.0)	52.1 (45.7, 58.4)	-0.8	55.8 (49.7, 61.7)	55.5 (49.5, 61.4)	-0.4
<i>Residence</i>									
Urban	6.1 (5.3, 6.9)	7.2 (6.4, 8.0)	17.6	22.6 (20.1, 25.3)	28.1 (25.2, 31.1)	24.2*	28.3 (25.7, 31.0)	32.5 (29.4, 35.7)	15.0
Rural	6.6 (5.8, 7.5)	6.4 (5.7, 7.3)	-2.7	23.9 (21.2, 26.8)	23.0 (20.3, 25.9)	-3.5	29.7 (27.0, 32.5)	27.3 (24.6, 30.3)	-7.9
<i>Education level<sup>4</sup></i>									
Primary or less	5.8 (4.7, 7.3)	6.1 (4.8, 7.6)	4.1	20.2 (16.3, 24.8)	20.7 (16.6, 25.4)	2.2	25.1 (21.1, 29.6)	24.2 (20.1, 28.9)	-3.5
Lower secondary	9.1 (8.0, 10.3)	9.2 (8.2, 10.5)	1.6	25.3 (22.6, 28.2)	26.4 (23.5, 29.5)	4.2	30.5 (27.8, 33.3)	29.5 (26.6, 32.5)	-3.2
Upper secondary	10.1 (8.0, 12.6)	9.0 (7.2, 11.3)	-10.3	29.8 (24.1, 36.3)	27.3 (21.8, 33.7)	-8.4	35.6 (30.0, 41.6)	32.6 (27.0, 38.8)	-8.3
College or above	10.0 (8.2, 12.1)	8.6 (7.1, 10.5)	-13.3	35.1 (29.5, 41.1)	35.1 (29.4, 41.3)	0.0	42.5 (37.0, 48.1)	42.6 (37.1, 48.3)	0.3

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

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

<sup>3</sup> Also known as the quit ratio for smoking.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001



In comparison with GATS 2010, GATS 2015 found that prevalence of former daily smokers had increased by 24.2% among ever daily smokers in urban areas (Table 5-19).

## 5.9 Type of current tobacco users

**Table 5-20: Percentage distribution of current tobacco users ≥15 years, by tobacco use pattern and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Current Tobacco Users <sup>1</sup>		Type of Current Tobacco Use						
			Smoked only		Smokeless only		Both smoked and smokeless		Total
Percentage (95% CI)									
<b>Overall</b>	24.2	(22.9, 25.5)	94.1	(92.5, 95.3)	4.8	(3.7, 6.1)	1.2	(0.7, 1.9)	100
<i>Gender</i>									
Male	46.4	(44.3, 48.5)	98.2	(97.2, 98.9)	0.5	(0.3, 1.1)	1.2	(0.7, 2.0)	100
Female	3.1	(2.5, 3.8)	35.3	(25.6, 46.4)	64.5	(53.4, 74.1)	0.2	(0.0, 1.6)	100
<i>Age (years)</i>									
15-24	13.1	(10.8, 15.8)	100.0	-	0.0	-	0.0	-	100
25-44	27.7	(25.7, 29.8)	97.7	(95.8, 98.7)	0.9	(0.3, 2.5)	1.4	(0.7, 2.7)	100
45-64	28.3	(26.4, 30.2)	95.6	(93.3, 97.1)	3.3	(2.1, 5.1)	1.2	(0.5, 2.8)	100
65+	23.7	(20.8, 26.9)	62.4	(54.6, 69.5)	36.1	(29.1, 43.8)	1.5	(0.6, 3.8)	100
<i>Residence</i>									
Urban	21.7	(20.1, 23.4)	97.1	(95.7, 98.1)	2.5	(1.6, 3.9)	0.4	(0.1, 1.0)	100
Rural	25.4	(23.7, 27.3)	92.8	(90.6, 94.5)	5.7	(4.3, 7.5)	1.5	(0.9, 2.6)	100
<i>Education level<sup>2</sup></i>									
Primary or less	29.5	(26.5, 32.7)	82.8	(76.9, 87.4)	15.6	(11.4, 21.0)	1.6	(0.6, 4.5)	100
Lower secondary	29.2	(27.3, 31.2)	96.1	(94.5, 97.3)	3.0	(2.1, 4.3)	0.9	(0.4, 2.0)	100
Upper secondary	27.7	(24.2, 31.4)	96.9	(92.9, 98.7)	1.0	(0.3, 3.2)	2.1	(0.7, 6.3)	100
College or above	19.4	(16.8, 22.3)	95.7	(91.4, 97.9)	2.5	(1.0, 6.4)	1.8	(0.6, 5.2)	100
<i>Occupation</i>									
Senior officials	26.0	(17.6, 36.6)	91.8	(59.9, 98.8)	0.0	-	8.2	(1.2, 40.1)	100
Professionals	16.5	(12.2, 21.9)	96.8	(80.6, 99.6)	3.2	(0.4, 19.4)	0.0	-	100
Associate professionals	17.7	(13.3, 23.1)	99.2	(94.1, 99.9)	0.0	-	0.8	(0.1, 5.9)	100
Elementary occupations	29.7	(27.6, 32.0)	95.8	(93.6, 97.3)	3.0	(1.9, 4.9)	1.1	(0.5, 2.3)	100
Other occupations	29.9	(27.3, 32.7)	97.8	(95.7, 98.9)	0.8	(0.4, 2.0)	1.4	(0.5, 3.4)	100

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

Table 5-20 presents the prevalence of current tobacco users aged 15 or older by selected demographic characteristics. The overall prevalence of current tobacco users (including current tobacco smokers who were daily or occasional tobacco smokers or who were smokeless tobacco users) was 24.2%. Classified by gender, the proportion of current tobacco users among males (46.4%) was 15 times that among females (3.1%). Among tobacco users, 94.1% smoked only tobacco, 4.8% used only smokeless tobacco, and 1.2% used both smoked and smokeless tobacco.

Among male tobacco users, 98.2% smoked only tobacco; among female tobacco users, 35.3% smoked only tobacco. However, more female than male tobacco users used smokeless tobacco (64.5% vs. 0.5%).

Smoked tobacco was least commonly used by the 65-or-older age group (62.4%), while 100% of those aged 15-24 smoked tobacco, 97.7% of 25-44 year olds, and 95.6% of 45-64 year olds. In turn, the prevalence of smokeless tobacco use was highest for the oldest group (36.1% vs. 0%, 0.9% and 3.3%).

The prevalence of current tobacco use was significantly lower in urban areas (21.7%) than in rural areas (25.4%). The proportion of tobacco users who smoked tobacco in urban areas was higher than in rural areas (97.1% vs.

92.8%). In contrast, the proportion of tobacco users who used smokeless tobacco in urban areas was lower than in rural areas (2.7% vs. 5.7%).

Respondents with a primary education or less (29.5%) were more likely to use tobacco than were those with a college education or above (19.4%). Those with a primary or lower level of education had lower prevalence of tobacco smoking than other education groups (82.8% vs. 95.7–96.9%). In contrast, those with a low education level had a higher prevalence of smokeless tobacco use (15.6% vs. 1–3%).

By occupation, the prevalence of current tobacco users was highest among those with elementary and “other occupations” and was lowest among those with professional occupations. Results showed no significant difference with regard to type of tobacco use among occupations.

## 5.10 Time to first smoke of the day

**Table 5-21: Percentage distribution of daily smokers ≥15 years, by time to first smoke upon waking and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Time to first smoke								Total
	≤5 minutes		6-30 minutes		31-60 minutes		>60 minutes		
	Percentage (95% CI)								
<b>Overall</b>	18.6	(16.5, 20.9)	44.4	(41.3, 47.4)	19.1	(16.8, 21.5)	18.0	(15.9, 20.3)	100
<i>Gender</i>									
Male	18.4	(16.3, 20.7)	44.4	(41.4, 47.5)	19.0	(16.8, 21.5)	18.2	(16.0, 20.5)	100
Female	26.6	(12.0, 49.0)	41.2	(25.4, 59.1)	20.2	(11.1, 33.9)	12.1	(5.5, 24.7)	100
<i>Age (years)</i>									
15-24	12.0	(6.5, 21.3)	40.6	(29.4, 52.9)	23.1	(15.2, 33.4)	24.3	(16.3, 34.7)	100
25-44	17.0	(14.0, 20.4)	46.6	(42.0, 51.1)	19.8	(16.4, 23.7)	16.7	(13.7, 20.2)	100
45-64	22.6	(19.0, 26.5)	43.6	(39.1, 48.1)	16.8	(13.9, 20.2)	17.0	(14.0, 20.5)	100
65+	22.7	(16.3, 30.6)	38.2	(29.8, 47.5)	17.3	(12.0, 24.4)	21.8	(15.2, 30.2)	100
<i>Residence</i>									
Urban	16.3	(13.6, 19.5)	38.6	(35.0, 42.3)	21.7	(18.1, 25.8)	23.4	(19.9, 27.2)	100
Rural	19.6	(16.8, 22.6)	46.9	(42.9, 50.9)	17.9	(15.2, 21.0)	15.7	(13.1, 18.6)	100
<i>Education level<sup>1</sup></i>									
Primary or less	22.1	(17.4, 27.7)	50.4	(44.0, 56.8)	15.4	(11.1, 20.9)	12.0	(8.5, 16.8)	100
Lower secondary	20.8	(17.8, 24.1)	43.6	(39.6, 47.6)	19.3	(16.3, 22.8)	16.3	(13.7, 19.3)	100
Upper secondary	15.8	(11.1, 21.9)	49.7	(41.9, 57.5)	18.7	(13.4, 25.4)	15.9	(10.8, 22.7)	100
College or above	12.4	(7.3, 20.4)	33.3	(25.4, 42.2)	20.4	(14.0, 28.8)	33.9	(26.0, 42.8)	100
<i>Occupation</i>									
Senior officials	~	~	~	~	~	~	~	~	100
Professionals	7.8	(2.8, 20.1)	39.9	(23.0, 59.6)	20.7	(9.1, 40.5)	31.6	(16.7, 51.6)	100
Associate professionals	11.4	(4.9, 24.2)	34.8	(19.2, 54.6)	23.3	(10.7, 43.4)	30.4	(16.3, 49.6)	100
Elementary occupations	19.4	(16.5, 22.6)	45.4	(41.4, 49.5)	20.6	(17.6, 23.9)	14.6	(12.2, 17.5)	100
Other occupations	19.1	(15.1, 23.9)	43.1	(37.6, 48.7)	17.4	(13.4, 22.3)	20.4	(16.0, 25.6)	100

<sup>1</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

One measure of evaluating nicotine dependence is how much time passes after waking before smoking the first cigarette of the day. **Table 5-21** presents the time before the first smoke of the day. The survey found that most daily smokers (44.4%) had their first smoke of the day between 6 and 30 minutes after waking, followed by those who had it within 31 to 60 minutes (19.1%), or within less than 5 minutes (18.6%). Compared with those with low education levels, smokers with a college education (12.4%) were least likely to smoke within 5 minutes of waking and more likely to begin smoking 60 minutes after waking. No other significant difference regarding this issue was found.

## 5.11 Electronic cigarettes

**Table 5-22: Electronic cigarette awareness and use among adults ≥ 15 years old, by selected demographic characteristics - GATS Viet Nam, 2015.**

Demographic characteristics	Ever heard of electronic cigarettes <sup>1</sup>		Ever used an electronic cigarette <sup>1</sup>		Current user of electronic cigarettes <sup>1,2</sup>	
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	18.6	(17.4, 19.7)	1.1	(0.8, 1.3)	0.2	(0.1, 0.4)
<i>Gender</i>						
Male	25.5	(23.7, 27.4)	2.0	(1.5, 2.5)	0.4	(0.2, 0.7)
Female	12.0	(10.9, 13.2)	0.2	(0.1, 0.4)	0.1	(0.0, 0.4)
<i>Age (years)</i>						
15-24	21.4	(18.8, 24.3)	0.9	(0.5, 1.6)	0.1	(0.0, 0.9)
25-44	21.3	(19.6, 23.1)	1.5	(1.1, 2.0)	0.3	(0.1, 0.6)
45-64	15.4	(14.0, 17.0)	0.7	(0.4, 1.1)	0.3	(0.1, 0.8)
65+	8.0	(6.3, 10.1)	0.3	(0.1, 1.1)	0.0	-
<i>Residence</i>						
Urban	27.5	(25.7, 29.4)	1.9	(1.5, 2.5)	0.2	(0.1, 0.4)
Rural	14.0	(12.6, 15.5)	0.6	(0.4, 0.9)	0.2	(0.1, 0.5)
<i>Education level<sup>3</sup></i>						
Primary or less	4.5	(3.4, 5.9)	0.2	(0.1, 0.5)	0.0	-
Lower secondary	13.4	(12.1, 14.8)	0.6	(0.4, 0.9)	0.2	(0.1, 0.5)
Upper secondary	26.0	(22.9, 29.3)	1.9	(1.1, 3.3)	0.3	(0.0, 1.9)
College or above	39.5	(36.3, 42.7)	3.1	(2.1, 4.4)	0.7	(0.3, 1.6)
<i>Occupation</i>						
Senior officials	43.1	(32.4, 54.5)	4.7	(1.7, 12.5)	1.0	(0.1, 7.0)
Professionals	49.8	(42.9, 56.8)	4.3	(2.3, 7.7)	0.5	(0.1, 3.6)
Associate professionals	34.4	(28.5, 40.7)	2.4	(1.1, 5.4)	1.1	(0.3, 4.7)
Elementary occupations	13.1	(11.7, 14.6)	0.7	(0.4, 1.1)	0.2	(0.1, 0.5)
Other occupations	23.4	(20.9, 26.1)	1.6	(1.1, 2.4)	0.4	(0.1, 0.9)

<sup>1</sup> Among all adults.

<sup>2</sup> Current use includes daily or less than daily use.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 5-22** presents data on awareness of electronic cigarettes and their prevalence of use by various socio-demographic groups. The proportion of adults who ever heard of electronic cigarettes was 18.6% overall, 25.5% of men and 12.0% of women. The prevalence of ever use of electronic cigarettes was 1.1% overall, and current users of electronic cigarettes accounted for 0.2%. The prevalence of men who ever used electronic cigarettes was 10 times higher than that of women (2% vs. 0.2%). The prevalence of men who currently used electronic cigarettes was four times higher than that of women (0.4% vs. 0.1%).

The proportion of those who ever heard about electronic cigarettes decreased with increasing age. Significantly lower proportions of those aged 45 or older than those aged 15 to 44 had heard about this cigarette type. The prevalence of use of electronic cigarettes was highest among those aged 25-44 years.

Adults in urban areas were more likely than those in rural areas to know about electronic cigarettes (27.5% vs. 14%) or to have ever used electronic cigarettes (1.9% vs. 0.6%).

Those with high education levels were more likely to know about electronic cigarettes (39.5% vs. 4.5% primary or lower education; 13.4% lower secondary; 26% upper secondary), had a higher prevalence of ever used these cigarettes (3.1% vs. 0.2% primary or lower; 0.6% lower secondary; 1.9% upper secondary), and a higher prevalence

of currently using this type of cigarette (0.7% vs. 0% primary or lower; 0.2% lower secondary; 0.3% upper secondary).

By occupation, those who had a professional occupation were more likely to know about electronic cigarettes or to have ever used such cigarettes than were those in elementary and other low-level occupations.

**Table 5-23** shows that for the question about the health effects of using e-cigarettes in comparison with the health effects of regular tobacco smoking, 18.1% answered “don’t know,” which was lower than the proportion of those who answered “a little less harmful” or “a lot less harmful” (43%).

Males had higher proportion than females of having answered “don’t know” (20.7% vs. 13%).

Those with a college education or above had a higher proportion of having answered “about the same,” or “a little less harmful” than those at lower education levels. In contrary, fewer respondents with a college education answered “don’t know” for the question about the health effects of e-cigarettes versus regular cigarettes.

**Table 5-23: Beliefs about the health effects of e-cigarettes compared to regular tobacco smoking among adults<sup>1</sup> ≥15 years old, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Compared to regular tobacco smoking, using e-cigarettes is...										Total		
	A lot more harmful		A little more harmful		About the same		A little less harmful		A lot less harmful			Don't Know	
	Percentage (95% CI)												
<b>Overall</b>	8.4	(6.8, 10.3)	8.2	(6.8, 9.8)	22.3	(19.8, 25.1)	28.9	(26.1, 31.8)	14.1	(12.2, 16.3)	18.1	(16.0, 20.5)	100
<i>Gender</i>													
Male	7.9	(6.0, 10.3)	7.5	(5.9, 9.4)	22.0	(19.0, 25.4)	27.3	(23.9, 30.8)	14.6	(12.3, 17.4)	20.7	(18.0, 23.8)	100
Female	9.4	(6.7, 13.0)	9.6	(7.2, 12.6)	22.9	(19.0, 27.3)	32.1	(27.5, 37.1)	13.1	(9.9, 17.1)	13.0	(10.1, 16.5)	100
<i>Age (years)</i>													
15-24	9.9	(6.4, 15.0)	6.9	(4.5, 10.4)	18.8	(14.2, 24.5)	36.9	(30.4, 43.8)	15.9	(11.4, 21.7)	11.7	(8.1, 16.5)	100
25-44	7.6	(5.5, 10.2)	7.6	(5.7, 10.2)	23.7	(20.3, 27.5)	27.6	(24.2, 31.2)	14.7	(11.9, 18.1)	18.8	(15.8, 22.1)	100
45-64	7.9	(5.8, 10.7)	10.5	(7.8, 14.0)	23.5	(19.4, 28.2)	24.5	(20.4, 29.3)	11.5	(8.7, 15.1)	22.1	(18.0, 26.8)	100
65+	10.7	(5.8, 18.9)	11.7	(6.4, 20.5)	22.3	(13.4, 34.8)	14.3	(8.5, 23.2)	8.8	(4.2, 17.2)	32.1	(22.2, 44.0)	100
<i>Residence</i>													
Urban	7.7	(5.8, 10.0)	8.0	(6.3, 10.2)	23.2	(20.2, 26.5)	29.6	(26.4, 33.1)	14.0	(11.7, 16.6)	17.5	(15.0, 20.3)	100
Rural	9.1	(6.6, 12.4)	8.4	(6.4, 10.9)	21.4	(17.5, 25.9)	28.1	(23.7, 33.0)	14.3	(11.2, 17.9)	18.8	(15.4, 22.7)	100
<i>Education level<sup>2</sup></i>													
Primary or less	12.8	(5.3, 27.5)	12.2	(6.3, 22.3)	22.2	(11.4, 38.8)	13.7	(7.0, 25.1)	12.2	(5.8, 24.0)	26.9	(16.9, 40.1)	100
Lower secondary	7.8	(5.2, 11.5)	11.6	(8.6, 15.5)	19.6	(15.7, 24.2)	21.9	(17.9, 26.4)	13.3	(10.3, 17.1)	25.8	(21.4, 30.7)	100
Upper secondary	7.2	(4.3, 11.7)	6.6	(4.0, 10.6)	23.2	(17.5, 30.0)	28.4	(22.5, 35.2)	15.3	(10.3, 22.1)	19.4	(14.5, 25.3)	100
College or above	7.5	(5.2, 10.9)	6.5	(4.3, 9.8)	28.0	(23.3, 33.1)	30.3	(25.8, 35.3)	12.7	(9.6, 16.6)	15.0	(11.6, 19.1)	100
<i>Occupation</i>													
Senior officials	5.1	(1.6, 15.5)	2.7	(0.5, 12.7)	26.4	(14.8, 42.7)	46.9	(30.2, 64.4)	14.1	(5.4, 31.9)	4.7	(0.8, 22.3)	100
Professionals	5.1	(2.6, 9.8)	5.2	(2.6, 10.0)	29.3	(21.3, 38.8)	37.2	(28.3, 47.1)	8.9	(5.3, 14.5)	14.3	(9.3, 21.5)	100
Associate professionals	4.2	(1.7, 9.9)	10.3	(5.8, 17.5)	21.1	(13.6, 31.2)	27.0	(18.6, 37.3)	22.4	(13.8, 34.3)	15.0	(8.6, 25.1)	100
Elementary occupations	7.8	(5.3, 11.3)	9.0	(6.6, 12.1)	23.6	(19.1, 28.7)	27.4	(22.7, 32.7)	10.6	(7.7, 14.5)	21.7	(17.6, 26.3)	100
Other occupations	9.4	(6.3, 13.8)	6.7	(4.6, 9.8)	20.2	(16.0, 25.1)	24.1	(19.9, 28.8)	19.0	(14.9, 24.0)	20.6	(16.4, 25.7)	100

<sup>1</sup> Among those who have ever heard of electronic cigarettes.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

## 6. Secondhand Smoke

### 6.1 Exposure to Secondhand Smoke at Work

**Table 6-1: Percentage and number of adults ≥15 years who work indoors and are exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Adults exposed to tobacco smoke at work <sup>1</sup>			
	Overall		Non-smokers	
	Percentage (95% CI)	Number in thousands	Percentage (95% CI)	Number in thousands
<b>Overall</b>	42.6 (39.9, 45.3)	8764.1	36.8 (34.0, 39.7)	5909.5
<i>Gender</i>				
Male	54.4 (50.6, 58.1)	5804.5	47.7 (42.9, 52.4)	2953.6
Female	29.9 (26.8, 33.1)	2959.5	29.9 (26.9, 33.2)	2955.9
<i>Age (years)</i>				
15-24	36.7 (30.5, 43.4)	1786.4	34.2 (27.9, 41.1)	1447.6
25-44	43.0 (39.7, 46.4)	4995.8	36.3 (32.8, 40.1)	3259.4
45-64	48.3 (44.1, 52.5)	1834.8	42.3 (37.6, 47.3)	1129.3
65+	49.8 (35.1, 64.7)	147.1	37.8 (22.2, 56.4)	73.2
<i>Residence</i>				
Urban	39.8 (36.9, 42.8)	3907.0	34.7 (31.5, 38.0)	2690.4
Rural	45.1 (40.7, 49.5)	4857.1	38.7 (34.2, 43.4)	3219.1
<i>Education level<sup>2</sup></i>				
Primary or less	52.9 (41.9, 63.6)	617.2	43.6 (31.3, 56.7)	366.7
Lower secondary	53.6 (49.0, 58.2)	2835.4	47.4 (41.9, 52.9)	1747.8
Upper secondary	48.1 (41.7, 54.6)	1469.3	41.9 (35.0, 49.1)	944.5
College or above	33.2 (29.5, 37.0)	2055.8	27.8 (24.0, 32.0)	1403.0
<i>Occupation</i>				
Senior officials	37.2 (26.6, 49.3)	198.5	31.1 (20.0, 44.9)	126.0
Professionals	25.6 (20.4, 31.7)	512.8	20.4 (15.3, 26.7)	345.2
Associate professionals	31.1 (24.7, 38.2)	673.0	27.5 (21.2, 34.9)	508.4
Elementary occupations	52.7 (47.7, 57.7)	3497.7	47.1 (41.8, 52.5)	2330.0
Other occupations	43.0 (38.7, 47.4)	3488.3	36.8 (32.1, 41.9)	2254.9

<sup>1</sup> In the past 30 days. Among those respondents who work outside of the home who usually work indoors or both indoors and outdoors.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

Prevalence of SHS at work is defined as the percentage of indoor workers aged 15 or older who were exposed to tobacco smoke at work in the previous 30 days. The definition of “worker” is a person who works outside the home and usually works indoors or both indoors and outdoors. Respondents who usually work outdoors but occasionally work indoors are excluded from this calculation, as are respondents who work from their own homes. **Table 6-1** shows that, in Viet Nam, 42.6% of all indoor workers (representing 8.8 million people) were exposed to SHS at work during the previous 30 days. The prevalence of exposure to SHS at work for non-smokers was 36.8% (representing 5.9 million people).

Among all indoor workers, males (54.4%) were more likely than females (29.9%) to have been exposed to SHS at work. Respondents aged 15 to 24 years were less likely to be exposed to SHS at work than those aged 45 years or older. Respondents with a college education or above (31.1%) were less likely to be exposed to SHS at work than were those with less education. No significant difference was found between those who lived in rural areas and those who lived in urban areas among people with various levels of occupation.

The pattern of exposure to SHS in indoor workplaces was similar for workers who smoked and those who did not smoke.

**Table 6-2: Percentage of adults ≥15 years who work indoors and are exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Viet Nam 2010 and relative change in 2015.**

Demographic characteristics	2010		Relative change	
	Overall	Non-smokers	Overall	Non-smokers
<b>Overall</b>	55.9 (52.8, 59.0)	49.0 (45.5, 52.6)	-23.8***	-25.0***
<i>Gender</i>				
Male	68.7 (64.9, 72.2)	62.8 (57.1, 68.1)	-20.9***	-24.1***
Female	41.4 (37.2, 45.7)	41.3 (37.1, 45.6)	-27.8***	-27.5***
<i>Age (years)</i>				
15-24	49.2 (41.8, 56.7)	45.7 (37.9, 53.7)	-25.5**	-25.2*
25-44	58.0 (54.4, 61.6)	50.4 (46.1, 54.6)	-25.9***	-27.9***
45-64	58.6 (53.6, 63.5)	50.3 (44.2, 56.3)	-17.6***	-15.8*
65+	59.0 (36.8, 78.0)	~	-15.5	-
<i>Residence</i>				
Urban	52.4 (49.1, 55.7)	45.1 (41.3, 49.0)	-24.0***	-23.0***
Rural	59.0 (53.9, 64.0)	52.6 (46.7, 58.5)	-23.6***	-26.5***
<i>Education level<sup>2</sup></i>				
Primary or less	66.1 (54.9, 75.7)	59.6 (46.5, 71.4)	-20.0	-26.9
Lower secondary	61.1 (56.3, 65.7)	51.2 (45.1, 57.2)	-12.3*	-7.4
Upper secondary	61.6 (55.7, 67.2)	55.8 (48.8, 62.5)	-21.9***	-25.0**
College or above	45.6 (41.1, 50.2)	41.1 (36.4, 46.0)	-27.3***	-32.3***

<sup>1</sup> In the past 30 days. Among those respondents who work outside of the home who usually work indoors.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 6-2** presents the prevalence of exposure to SHS in 2010 and relative change between 2010 and 2015. In general, the prevalence of exposure to SHS decreased by 25%. The reduction was significant for all socioeconomic groups. The prevalence of SHS declined more among those who were younger and had higher education levels. However, no significant difference in the relative change rate was found.

## 6.2 SHS exposure at home

**Table 6-3: Percentage and number of adults ≥15 years who are exposed to tobacco smoke at home, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Adults exposed to tobacco smoke at home <sup>1</sup>					
	Overall			Non-smokers		
	Percentage (95% CI)		Number in thousands	Percentage (95% CI)		Number in thousands
<b>Overall</b>	59.9	(58.2, 61.7)	41217.8	53.5	(51.6, 55.4)	28461.2
<i>Gender</i>						
Male	65.2	(63.0, 67.3)	21745.2	51.3	(48.3, 54.3)	9336.3
Female	55.0	(53.0, 57.0)	19472.7	54.6	(52.6, 56.6)	19125.0
<i>Age (years)</i>						
15-24	64.5	(60.8, 68.0)	10189.5	61.5	(57.6, 65.2)	8498.3
25-44	59.2	(56.8, 61.5)	17058.1	51.5	(48.8, 54.2)	10830.2
45-64	60.0	(57.7, 62.3)	10704.2	51.4	(48.8, 54.0)	6700.2
65+	51.8	(48.1, 55.4)	3266.1	45.5	(41.6, 49.4)	2432.6
<i>Residence</i>						
Urban	47.0	(44.5, 49.6)	10902.3	40.7	(38.0, 43.4)	7470.9
Rural	66.5	(64.2, 68.7)	30315.5	60.2	(57.7, 62.7)	20990.3
<i>Education level<sup>2</sup></i>						
Primary or less	66.8	(63.4, 70.0)	7151.2	58.4	(54.5, 62.2)	4697.0
Lower secondary	62.1	(59.9, 64.3)	15935.8	54.3	(51.8, 56.8)	10022.4
Upper secondary	54.7	(50.9, 58.5)	4232.9	45.9	(41.5, 50.3)	2598.4
College or above	41.7	(38.1, 45.4)	3679.5	36.3	(32.4, 40.4)	2616.1
<i>Occupation</i>						
Senior officials	47.4	(36.6, 58.6)	294.6	39.1	(27.0, 52.7)	179.7
Professionals	40.4	(33.8, 47.4)	854.6	36.8	(29.8, 44.4)	660.9
Associate professionals	45.6	(39.0, 52.3)	1123.0	40.6	(33.6, 48.0)	827.3
Elementary occupations	67.7	(65.4, 70.0)	20385.4	59.9	(57.2, 62.5)	12910.9
Other occupations	57.7	(54.8, 60.6)	8842.0	50.2	(46.6, 53.8)	5429.2

<sup>1</sup> Adults reporting that smoking inside their home occurs daily, weekly, or monthly.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

**Table 6-3** shows the pattern of exposure to SHS at home among respondents in the previous 30 days: 59.9% of adults aged 15 or older (representing about 41.2 million people) said they were exposed to SHS at home. The prevalence of exposure to SHS at home for non-smokers was 53.5% (equivalent to about 28.5 million people).

Overall, males (65.2%) had a higher prevalence of exposure to SHS at home than females (55.0%). By age, the highest rate of exposure to SHS at home was for those aged 15-24 (64.5%); the lowest rate was for those aged 65 or older (51.8%). People living in rural areas (66.5%) were more likely than people living in urban areas (47.0%) to be exposed to SHS at home. People with a primary education or lower had the highest prevalence of exposure to SHS at home (66.8%) and those with a bachelor's degree or higher had the lowest rate (41.7%). Those who had elementary occupations (67.7%) and other occupations (57.7%) had higher prevalence of exposure to SHS than those who were senior officials (47.4%) or professionals (40.4%).

The pattern of exposure to SHS for non-smokers was similar to that of adults overall.



**Table 6-4: Percentage and number of adults ≥15 years who are exposed to tobacco smoke at home, by smoking status and selected demographic characteristics – GATS Viet Nam 2010 and relative change in 2015.**

Demographic characteristics	2010		Relative change	
	Overall	Non-smokers	Overall	Non-smokers
<b>Overall</b>	73.1 (71.7, 74.5)	67.6 (65.9, 69.2)	-18.0***	-20.9***
<i>Gender</i>				
Male	77.2 (75.5, 78.9)	65.2 (62.3, 67.9)	-15.6***	-21.3***
Female	69.2 (67.4, 71.0)	68.8 (67.0, 70.6)	-20.5***	-20.6***
<i>Age (years)</i>				
15-24	75.9 (73.1, 78.5)	74.2 (71.2, 77.0)	-15.1***	-17.1***
25-44	74.7 (72.9, 76.3)	68.2 (66.1, 70.4)	-20.7***	-24.5***
45-64	71.2 (69.1, 73.2)	62.1 (59.4, 64.7)	-15.6***	-17.2***
65+	62.7 (59.0, 66.3)	57.2 (53.1, 61.3)	-17.4***	-20.5***
<i>Residence</i>				
Urban	63.3 (61.1, 65.5)	57.7 (55.2, 60.2)	-25.8***	-29.5***
Rural	77.4 (75.7, 79.1)	72.0 (69.9, 74.0)	-14.1***	-16.3***
<i>Education level<sup>2</sup></i>				
Primary or less	77.8 (75.2, 80.1)	71.5 (68.5, 74.4)	-14.1***	-18.3***
Lower secondary	74.3 (72.5, 76.1)	66.8 (64.4, 69.0)	-16.4***	-18.6***
Upper secondary	64.7 (61.2, 67.9)	56.6 (52.5, 60.7)	-15.4***	-19.0***
College or above	50.6 (46.9, 54.3)	43.7 (39.7, 47.8)	-17.6***	-16.9**

<sup>1</sup> Adults reporting that smoking inside their home occurs daily, weekly, or monthly.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

**Table 6-4** presents the prevalence of exposure to SHS at home in 2010 and relative changes in 2015. In general, exposure to SHS at home significantly decreased, by 18% overall and by 20.9% for non-smokers. Significantly lower prevalence of exposure to SHS at home was observed for all socioeconomic groups. Those who live in urban areas had a higher reduction in prevalence of SHS at home than those who lived in rural areas (a 25.8% decrease for urban vs. 14.1% rural).

### 6.3 Secondhand smoke exposure in public places

The GATS survey asked respondents about visiting various public places in the previous 30 days and whether they had noticed people smoking inside these places. “Noticing smoking while visiting a public place” was used as a proxy for exposure to SHS.

**Table 6-5 presents patterns of exposure to SHS in public places. Among adults who visited various public places in the previous 30 days, the vast majority reported exposure to SHS in bars/cafes/tea shops (89.1%), followed by restaurants (80.7%). Exposure to SHS was lowest in schools (16.1%) and healthcare facilities (18.4%). The prevalence rates of exposure to SHS at universities was 37.8% and in government office buildings, 30.9%.**

The pattern was similar for non-smokers who had visited various public places in the previous 30 days. The highest proportion of exposure to SHS was found in bars/cafes/tea shops (86.4%), followed by restaurants (77.5%). Healthcare facilities (16.8%) and schools (16%) had the lowest rates of exposure to SHS. The prevalence rates of exposure to SHS at universities was 37.2% and in government office buildings, 28.8%.

At all sites, the rates of exposure to SHS for non-smokers were higher for males than for females.

**Table 6-6, Table 6-7, and Table 6-8** present the relative change in prevalence of exposure to SHS for respondents when they visited various public places in the previous 30 days. For all places, the reduction in prevalence from 2010 to 2015 was significant with a relative change that ranged from lowest at 3.8% in bars/cafés/tea shops, 4.9% in restaurants, 20.2% in government buildings, 22.0% in healthcare facilities, 27.9% in schools, 30.3% in universities to the highest exposure of 43.6% on public transportation. Among current smokers, exposure to SHS at healthcare facilities, schools, and universities was not significantly decreased.

The prevalence of exposure to SHS for both males and females decreased significantly in all public places.

Stratified analyses found that, in comparison with findings from GATS 2010, prevalence of exposure to SHS in 2015 on public transportation significantly decreased for all age groups. Exposure also decreased significantly in schools for those aged 15--44 at universities, for those aged 15-24 in the bars/cafés/tea shops, for those aged 15--44 in restaurants, and for those aged 25-64 in government buildings and healthcare facilities.

Significant decline in the prevalence of exposure to SHS in all public places was found for both urban and rural residents. No difference was found between urban and rural areas with regard to the size of decline.

The reduction in prevalence of exposure to SHS in government buildings and on public transportation was significant for all groups. The other significant reductions were in healthcare facilities for those with a lower secondary level education and above, in restaurants for those with upper secondary education, and in bars/cafes/tea shops and in schools for those with a college education.

**Table 6-5: Percentage of adults ≥15 years who noticed tobacco smoke when visiting various public places in the past 30 days, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Adults exposed to tobacco smoke <sup>1</sup> in...													
	Government buildings		Healthcare facilities		Restaurants		Bars/cafes/tea shops		Public transportation		Schools		Universities	
	<i>Percentage (95% CI)</i>													
<b>Overall</b>	30.9	(28.2, 33.7)	18.4	(16.5, 20.4)	80.7	(78.8, 82.4)	89.1	(87.4, 90.6)	19.4	(16.7, 22.4)	16.1	(14.4, 18.0)	37.9	(32.0, 44.1)
<i>Gender</i>														
Male	38.4	(34.7, 42.3)	22.9	(19.6, 26.5)	87.1	(84.9, 89.1)	92.9	(91.1, 94.4)	22.8	(18.7, 27.4)	20.1	(17.3, 23.1)	45.1	(36.6, 53.8)
Female	21.4	(18.3, 24.8)	15.5	(13.4, 17.8)	70.9	(67.8, 73.7)	81.5	(78.2, 84.4)	15.8	(12.8, 19.5)	13.1	(11.0, 15.4)	27.2	(19.8, 36.1)
<i>Age (years)</i>														
15-24	30.4	(24.0, 37.6)	24.1	(18.5, 30.9)	80.2	(76.0, 83.9)	85.3	(81.4, 88.5)	21.7	(15.9, 28.8)	24.4	(19.9, 29.5)	41.0	(33.2, 49.3)
25-44	32.2	(28.4, 36.2)	18.6	(15.5, 22.0)	81.6	(79.3, 83.6)	90.6	(88.4, 92.4)	19.2	(15.6, 23.5)	13.9	(12.0, 16.1)	34.3	(25.0, 45.1)
45-64	29.3	(25.7, 33.1)	16.9	(14.4, 19.7)	81.3	(78.4, 84.0)	91.4	(88.7, 93.5)	18.7	(14.9, 23.2)	11.9	(9.1, 15.4)	28.3	(17.1, 43.0)
65+	29.6	(23.6, 36.3)	13.2	(10.0, 17.3)	65.7	(56.6, 73.7)	90.7	(80.3, 95.9)	12.2	(6.9, 20.4)	5.8	(2.3, 13.9)	~	~
<i>Residence</i>														
Urban	28.0	(24.9, 31.4)	21.9	(19.1, 24.9)	80.2	(78.0, 82.3)	88.0	(85.8, 89.9)	19.7	(16.5, 23.3)	16.4	(14.3, 18.7)	38.9	(32.4, 45.9)
Rural	32.9	(29.0, 37.1)	16.5	(14.0, 19.2)	81.1	(78.1, 83.7)	90.2	(87.4, 92.4)	19.1	(15.1, 23.8)	16.0	(13.5, 18.7)	36.5	(26.4, 47.8)
<i>Education level<sup>2</sup></i>														
Primary or less	23.4	(16.1, 32.6)	14.9	(11.2, 19.5)	72.7	(65.2, 79.1)	89.2	(80.8, 94.2)	15.1	(9.0, 24.3)	13.1	(8.4, 19.8)	~	~
Lower secondary	28.8	(24.9, 33.0)	15.0	(12.3, 18.2)	80.5	(77.6, 83.0)	92.1	(89.4, 94.1)	19.8	(15.9, 24.5)	12.8	(10.6, 15.4)	16.7	(7.2, 34.1)
Upper secondary	33.0	(27.0, 39.7)	20.6	(15.5, 26.9)	84.8	(80.9, 88.0)	92.5	(88.8, 95.0)	18.7	(12.6, 26.9)	15.9	(11.3, 21.8)	38.7	(19.9, 61.5)
College or above	34.0	(29.9, 38.4)	21.1	(17.0, 26.0)	81.0	(77.7, 83.9)	88.7	(85.7, 91.1)	17.4	(13.1, 22.7)	12.2	(9.4, 15.6)	33.3	(24.3, 43.8)
<i>Occupation</i>														
Senior officials	53.3	(41.2, 64.9)	12.5	(5.0, 27.8)	85.1	(74.8, 91.6)	95.3	(87.5, 98.3)	~	~	18.2	(9.4, 32.3)	~	~
Professionals	34.1	(26.8, 42.3)	22.8	(15.0, 33.0)	80.4	(74.1, 85.5)	85.4	(79.2, 90.0)	23.2	(14.8, 34.5)	13.1	(8.6, 19.5)	35.1	(20.5, 53.3)
Associate professionals	35.2	(27.5, 43.8)	23.1	(15.0, 33.8)	84.7	(78.6, 89.2)	88.0	(81.2, 92.6)	20.4	(11.4, 33.9)	15.7	(9.7, 24.5)	19.3	(9.3, 35.8)
Elementary occupations	30.6	(25.8, 35.8)	17.0	(13.8, 20.8)	82.6	(79.6, 85.1)	90.0	(87.1, 92.2)	17.2	(13.3, 22.0)	14.7	(12.3, 17.4)	33.7	(19.3, 51.9)
Other occupations	30.1	(25.1, 35.5)	18.3	(14.5, 22.8)	82.5	(79.3, 85.3)	92.4	(89.6, 94.5)	24.4	(18.6, 31.4)	11.1	(8.5, 14.3)	31.3	(16.8, 50.7)

<sup>1</sup> Among those that visited the place in the past 30 days.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

Demographic characteristics	Adults exposed to tobacco smoke <sup>1</sup> in...													
	Government buildings		Healthcare facilities		Restaurants		Bars/cafes/tea shops		Public transportation		Schools		Universities	
	<i>Percentage (95% CI)</i>													
<b>Non-smokers</b>	28.8	(25.7, 32.0)	16.8	(14.9, 19.0)	77.5	(75.4, 79.5)	86.4	(84.2, 88.3)	18.5	(15.7, 21.8)	16.0	(14.1, 18.1)	37.2	(30.9, 43.9)
<i>Gender</i>														
Male	38.4	(33.2, 43.8)	20.5	(16.5, 25.2)	85.5	(82.6, 88.0)	91.0	(88.3, 93.1)	23.7	(18.5, 29.9)	22.3	(18.6, 26.5)	46.0	(36.1, 56.1)
Female	21.4	(18.4, 24.9)	15.3	(13.3, 17.6)	70.9	(67.8, 73.7)	81.4	(78.0, 84.3)	15.5	(12.5, 19.1)	13.0	(11.0, 15.3)	27.2	(19.8, 36.1)
<i>Age (years)</i>														
15-24	29.2	(22.6, 36.9)	22.9	(17.2, 29.9)	79.1	(74.8, 82.9)	83.6	(79.4, 87.2)	19.5	(13.9, 26.7)	25.3	(20.7, 30.5)	39.9	(31.9, 48.6)
25-44	30.7	(26.3, 35.5)	16.3	(13.3, 19.7)	77.9	(75.1, 80.5)	88.3	(85.5, 90.6)	18.3	(14.4, 23.1)	12.8	(10.8, 15.1)	32.6	(22.6, 44.5)
45-64	24.9	(21.0, 29.2)	15.4	(12.8, 18.4)	77.2	(73.2, 80.7)	87.3	(82.9, 90.7)	18.8	(14.4, 24.2)	10.5	(7.6, 14.2)	29.0	(15.3, 48.0)
65+	27.7	(21.2, 35.4)	12.1	(8.6, 16.6)	57.4	(46.6, 67.6)	87.4	(70.0, 95.4)	13.2	(7.1, 23.0)	4.2	(1.3, 12.5)	~	~
<i>Residence</i>														
Urban	26.7	(23.3, 30.4)	21.5	(18.6, 24.7)	76.8	(74.2, 79.3)	84.4	(81.5, 86.9)	19.4	(16.0, 23.2)	16.1	(13.8, 18.6)	35.9	(29.2, 43.3)
Rural	30.3	(25.7, 35.3)	14.1	(11.6, 17.0)	78.1	(74.7, 81.2)	88.5	(85.1, 91.1)	17.7	(13.4, 23.1)	16.0	(13.3, 19.1)	38.7	(27.9, 50.7)
<i>Education level<sup>2</sup></i>														
Primary or less	21.9	(13.4, 33.7)	12.0	(8.6, 16.5)	66.1	(56.5, 74.5)	79.8	(66.7, 88.6)	14.6	(8.0, 25.3)	11.4	(6.4, 19.2)	~	~
Lower secondary	27.1	(22.7, 32.1)	12.4	(10.0, 15.2)	75.9	(71.9, 79.4)	89.5	(85.8, 92.3)	18.7	(14.2, 24.2)	11.4	(9.1, 14.2)	22.1	(9.3, 44.1)
Upper secondary	29.3	(22.5, 37.1)	21.0	(15.4, 27.9)	80.5	(75.3, 84.9)	92.3	(88.1, 95.0)	19.1	(12.3, 28.6)	14.4	(9.8, 20.6)	43.1	(21.0, 68.3)
College or above	30.9	(26.4, 35.7)	19.7	(15.4, 24.7)	77.8	(74.0, 81.2)	86.3	(82.6, 89.3)	17.6	(13.0, 23.5)	11.7	(8.9, 15.2)	27.5	(18.7, 38.4)
<i>Occupation</i>														
Senior officials	52.8	(38.6, 66.5)	0.7	(0.1, 4.7)	84.0	(72.2, 91.4)	94.2	(83.6, 98.1)	~	~	15.3	(6.4, 32.3)	~	~
Professionals	31.8	(23.7, 41.2)	20.5	(12.8, 31.3)	78.1	(70.9, 84.0)	82.3	(74.9, 87.9)	19.2	(11.2, 30.8)	13.7	(8.8, 20.7)	30.3	(15.5, 50.8)
Associate professionals	31.7	(23.6, 41.2)	21.6	(13.3, 33.0)	82.6	(75.5, 87.9)	86.2	(78.2, 91.6)	19.2	(10.1, 33.3)	12.8	(7.3, 21.7)	20.1	(9.3, 38.1)
Elementary occupations	30.1	(24.2, 36.8)	15.0	(11.9, 18.8)	79.3	(75.7, 82.4)	85.8	(81.5, 89.3)	16.0	(11.6, 21.6)	13.5	(10.9, 16.6)	33.7	(15.9, 57.9)
Other occupations	25.3	(19.7, 31.8)	15.8	(12.1, 20.5)	79.4	(75.5, 82.8)	91.5	(88.4, 93.9)	25.1	(18.6, 32.9)	10.4	(7.5, 14.3)	29.3	(14.2, 50.9)

<sup>1</sup> Among those that visited the place in the past 30 days.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 6-6: Percentage of adults ≥15 years old who were exposed to tobacco smoke when visiting government buildings and healthcare facilities in the past 30 days, by smoking status and selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Adults exposed to tobacco smoke <sup>1</sup> in...					
	2010		2015		Relative change	
	Government buildings	Healthcare facilities	Government buildings	Healthcare facilities	Government buildings	Healthcare facilities
	<i>Percentage (95% CI)</i>		<i>Percentage (95% CI)</i>		<i>Percentage</i>	
<b>Overall</b>	38.7 (36.2, 41.3)	23.6 (21.4, 25.9)	30.9 (28.2, 33.7)	18.4 (16.5, 20.4)	-20.2***	-22.0***
<i>Smoking status</i>						
Current smokers <sup>2</sup>	49.2 (44.0, 54.5)	34.5 (28.2, 41.4)	38.2 (33.2, 43.4)	26.8 (21.2, 33.2)	-22.5***	-22.4
Non-smokers <sup>3</sup>	34.8 (31.9, 37.7)	21.6 (19.4, 23.9)	28.8 (25.7, 32.0)	16.8 (14.9, 19.0)	-17.2**	-22.1***
<i>Gender</i>						
Male	45.4 (42.0, 48.8)	29.9 (26.1, 34.0)	38.4 (34.7, 42.3)	22.9 (19.6, 26.5)	-15.4**	-23.5**
Female	28.4 (25.0, 32.1)	19.6 (17.1, 22.4)	21.4 (18.3, 24.8)	15.5 (13.4, 17.8)	-24.7***	-21.2**
<i>Age (years)</i>						
15-24	38.0 (31.9, 44.4)	29.8 (23.9, 36.5)	30.4 (24.0, 37.6)	24.1 (18.5, 30.9)	-20.0	-19.0
25-44	38.3 (34.9, 41.9)	23.4 (20.3, 26.8)	32.2 (28.4, 36.2)	18.6 (15.5, 22.0)	-16.0*	-20.7*
45-64	40.8 (36.6, 45.1)	21.4 (17.8, 25.5)	29.3 (25.7, 33.1)	16.9 (14.4, 19.7)	-28.2***	-21.0*
65+	34.2 (25.9, 43.5)	18.1 (13.5, 23.9)	29.6 (23.6, 36.3)	13.2 (10.0, 17.3)	-13.5	-27.2
<i>Residence</i>						
Urban	37.8 (34.5, 41.1)	28.0 (24.8, 31.4)	28.0 (24.9, 31.4)	21.9 (19.1, 24.9)	-25.8***	-21.9**
Rural	39.3 (35.8, 43.0)	21.4 (18.6, 24.5)	32.9 (29.0, 37.1)	16.5 (14.0, 19.2)	-16.3*	-23.1**
<i>Education level<sup>4</sup></i>						
Primary or less	35.7 (28.1, 44.1)	17.9 (14.0, 22.7)	23.4 (16.1, 32.6)	14.9 (11.2, 19.5)	-34.6*	-17.1
Lower secondary	36.0 (32.2, 39.9)	20.2 (17.2, 23.5)	28.8 (24.9, 33.0)	15.0 (12.3, 18.2)	-19.9**	-25.5**
Upper secondary	40.4 (34.2, 46.9)	29.5 (23.2, 36.7)	33.0 (27.0, 39.7)	20.6 (15.5, 26.9)	-18.3	-30.2*
College or above	46.4 (42.2, 50.6)	28.3 (23.6, 33.6)	34.0 (29.9, 38.4)	21.1 (17.0, 26.0)	-26.6***	-25.5*

<sup>1</sup> Among those that visited the place in the past 30 days.

<sup>2</sup> Includes daily and occasional (less than daily) smokers.

<sup>3</sup> Includes former and never smokers.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

**Table 6-7: Percentage of adults ≥15 years old who were exposed to tobacco smoke when visiting restaurants and bars/cafes/tea shops in the past 30 days, by smoking status and selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Adults exposed to tobacco smoke <sup>1</sup> in...					
	2010		2015		Relative change	
	Restaurants	Bars/cafes/tea shops	Restaurants	Bars/Cafes/Tea shops	Restaurants	Bars/cafes/tea shops
<b>Overall</b>	84.9 (83.2, 86.4)	92.6 (91.2, 93.8)	80.7 (78.8, 82.4)	89.1 (87.4, 90.6)	-4.9***	-3.8***
<i>Smoking status</i>						
Current smokers <sup>2</sup>	93.9 (91.5, 95.6)	98.1 (96.4, 99.0)	88.8 (85.6, 91.3)	95.2 (92.5, 96.9)	-5.4**	-3.0*
Non-smokers <sup>3</sup>	80.7 (78.5, 82.7)	89.4 (87.4, 91.2)	77.5 (75.4, 79.5)	86.4 (84.2, 88.3)	-4.0*	-3.4*
<i>Gender</i>						
Male	90.9 (89.0, 92.4)	96.2 (94.7, 97.2)	87.1 (84.9, 89.1)	92.9 (91.1, 94.4)	-4.1**	-3.4**
Female	75.2 (72.0, 78.2)	84.0 (80.8, 86.8)	70.9 (67.8, 73.7)	81.5 (78.2, 84.4)	-5.8*	-3.0
<i>Age (years)</i>						
15-24	87.4 (83.7, 90.4)	92.3 (89.7, 94.2)	80.2 (76.0, 83.9)	85.3 (81.4, 88.5)	-8.2**	-7.6***
25-44	86.5 (84.3, 88.5)	93.1 (90.9, 94.8)	81.6 (79.3, 83.6)	90.6 (88.4, 92.4)	-5.8***	-2.7
45-64	79.4 (75.4, 82.9)	93.4 (90.7, 95.4)	81.3 (78.4, 84.0)	91.4 (88.7, 93.5)	2.5	-2.2
65+	60.6 (49.7, 70.6)	77.1 (62.1, 87.3)	65.7 (56.6, 73.7)	90.7 (80.3, 95.9)	8.3	17.6
<i>Residence</i>						
Urban	84.0 (82.0, 85.8)	91.1 (89.5, 92.5)	80.2 (78.0, 82.3)	88.0 (85.8, 89.9)	-4.5**	-3.4*
Rural	85.7 (82.9, 88.0)	93.9 (91.6, 95.6)	81.1 (78.1, 83.7)	90.2 (87.4, 92.4)	-5.3*	-4.0*
<i>Education level<sup>4</sup></i>						
Primary or less	76.2 (69.3, 81.9)	91.9 (85.3, 95.7)	72.7 (65.2, 79.1)	89.2 (80.8, 94.2)	-4.6	-2.9
Lower secondary	82.1 (79.1, 84.8)	93.1 (90.8, 94.9)	80.5 (77.6, 83.0)	92.1 (89.4, 94.1)	-2.0	-1.1
Upper secondary	89.9 (86.1, 92.7)	92.4 (88.1, 95.2)	84.8 (80.9, 88.0)	92.5 (88.8, 95.0)	-5.7*	0.1
College or above	84.7 (81.4, 87.5)	93.0 (89.8, 95.3)	81.0 (77.7, 83.9)	88.7 (85.7, 91.1)	-4.4	-4.7*

<sup>1</sup> Among those that visited the place in the past 30 days.

<sup>2</sup> Includes daily and occasional (less than daily) smokers.

<sup>3</sup> Includes former and never smokers.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

**Table 6-8: Percentage of adults ≥15 years old who were exposed to tobacco smoke when visiting public transportation, schools, and universities in the past 30 days, by smoking status and selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Adults exposed to tobacco smoke <sup>1</sup> in...								
	2010			2015			Relative change		
	Public transportation	Schools	Universities	Public transportation	Schools	Universities	Public transportation	Schools	Universities
	<i>Percentage (95% CI)</i>			<i>Percentage (95% CI)</i>			<i>Percentage</i>		
<b>Overall</b>	34.4 (31.5, 37.4)	22.3 (20.2, 24.6)	54.3 (48.9, 59.7)	19.4 (16.7, 22.4)	16.1 (14.4, 18.0)	37.9 (32.0, 44.1)	-43.6***	-27.9***	-30.3***
<i>Smoking status</i>									
Current smokers <sup>2</sup>	37.8 (31.6, 44.5)	18.6 (14.9, 23.0)	45.3 (32.3, 59.0)	22.2 (16.8, 28.7)	16.6 (13.1, 20.9)	42.1 (28.4, 57.1)	-41.3***	-10.6	-7.0
Non-smokers <sup>3</sup>	33.3 (30.1, 36.7)	23.1 (20.8, 25.6)	55.6 (49.7, 61.3)	18.5 (15.7, 21.8)	16.0 (14.1, 18.1)	37.2 (30.9, 43.9)	-44.4***	-30.7***	-33.1***
<i>Gender</i>									
Male	38.8 (34.4, 43.4)	26.2 (22.9, 29.8)	60.2 (52.7, 67.2)	22.8 (18.7, 27.4)	20.1 (17.3, 23.1)	45.1 (36.6, 53.8)	-41.2***	-23.4**	-25.1**
Female	29.6 (26.1, 33.4)	19.2 (16.8, 21.7)	47.5 (39.6, 55.5)	15.8 (12.8, 19.5)	13.1 (11.0, 15.4)	27.2 (19.8, 36.1)	-46.6***	-31.8***	-42.7***
<i>Age (years)</i>									
15-24	37.2 (31.7, 43.1)	42.9 (38.2, 47.6)	59.1 (52.1, 65.9)	21.7 (15.9, 28.8)	24.4 (19.9, 29.5)	41.0 (33.2, 49.3)	-41.8***	-43.1***	-30.7***
25-44	36.5 (32.1, 41.2)	13.1 (11.2, 15.3)	46.7 (37.8, 55.9)	19.2 (15.6, 23.5)	13.9 (12.0, 16.1)	34.3 (25.0, 45.1)	-47.4***	6.4	-26.5*
45-64	29.4 (24.7, 34.5)	9.3 (6.9, 12.6)	37.6 (24.8, 52.3)	18.7 (14.9, 23.2)	11.9 (9.1, 15.4)	28.3 (17.1, 43.0)	-36.4***	27.8	-24.8
65+	21.7 (15.3, 29.9)	9.7 (4.2, 20.6)	~	12.2 (6.9, 20.4)	5.8 (2.3, 13.9)	~	-43.9*	-39.7	-
<i>Residence</i>									
Urban	31.5 (28.1, 35.2)	21.7 (19.3, 24.4)	51.9 (46.9, 56.9)	19.7 (16.5, 23.3)	16.4 (14.3, 18.7)	38.9 (32.4, 45.9)	-37.5***	-24.6***	-25.0**
Rural	36.4 (32.2, 40.8)	22.7 (19.8, 25.9)	58.4 (46.8, 69.2)	19.1 (15.1, 23.8)	16.0 (13.5, 18.7)	36.5 (26.4, 47.8)	-47.5***	-29.6***	-37.6**
<i>Education level<sup>4</sup></i>									
Primary or less	28.0 (21.7, 35.4)	11.8 (8.3, 16.6)	~	15.1 (9.0, 24.3)	13.1 (8.4, 19.8)	~	-46.2**	10.4	-
Lower secondary	35.1 (30.7, 39.8)	11.3 (9.3, 13.6)	35.7 (21.1, 53.5)	19.8 (15.9, 24.5)	12.8 (10.6, 15.4)	16.7 (7.2, 34.1)	-43.5***	13.9	-53.3*
Upper secondary	33.2 (25.9, 41.3)	12.2 (8.6, 17.0)	43.4 (27.1, 61.2)	18.7 (12.6, 26.9)	15.9 (11.3, 21.8)	38.7 (19.9, 61.5)	-43.5***	30.4	-10.8
College or above	30.3 (25.1, 36.1)	16.2 (13.1, 19.9)	50.9 (41.4, 60.3)	17.4 (13.1, 22.7)	12.2 (9.4, 15.6)	33.3 (24.3, 43.8)	-42.6***	-24.7	-34.5**

<sup>1</sup> Among those that visited the place in the past 30 days.

<sup>2</sup> Includes daily and occasional (less than daily) smokers.

<sup>3</sup> Includes former and never smokers.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## 7. Cessation

### 7.1 Interest in quitting smoking

For GATS, “interest in quitting smoking” is defined as current tobacco smokers who say they are planning to quit or thinking about quitting smoking within the next month, 12 months, or someday.

**Table 7.1** presents five categories of “interest in quitting smoking.” The answer “Not interested in quitting” was most commonly selected (42.4%), and then “Will quit someday, but not in the next 12 months” (35.9%). These two responses were followed by “Thinking about quitting within the next 12 months” (12.6%), “Planning to quit within the next month” (5.2%), and “Don’t know” (4%). Overall, 53.6% of current smokers were planning to quit or thinking about quitting sometime in the future.

The proportion of male smokers indicating interest in quitting smoking was significantly higher than the proportion of female smokers for the answer “Will quit someday, but not in the next 12 months”: 36.4% vs. 17.2%. Inversely, the proportion of female smokers with no interest in quitting smoking was higher than the proportion of male smokers (“not interested in quitting”: 56.1% of females vs. 42.1% of males).

Respondents with primary or lower education had less interest in quitting smoking, irrespective of when they might decide to quit. However, significant differences among the education groups were found only in proportions of those who reported “not interested in quitting.”

“Not interested in quitting” was reported by only 13.4% of senior officials; however, it was reported by 44.2% of those with elementary occupations and by 41.5% of those with other occupations.

There was no difference in interest in quitting smoking between smokers in urban and rural areas or among age groups.



**Table 7-1: Percentage distribution of current smokers ≥15 years old by interest in quitting smoking and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Interest in quitting smoking <sup>1</sup>										Total
	Planning to quit within next month		Thinking about quitting within next 12 months		Will quit someday, but not in the next 12 months		Not interested in quitting		Don't know		
	<i>Percentage (95% CI)</i>										
<b>Overall</b>	5.2	(4.2, 6.4)	12.6	(10.9, 14.5)	35.9	(33.2, 38.6)	42.4	(39.6, 45.3)	4.0	(3.0, 5.2)	100
<i>Gender</i>											
Male	5.1	(4.1, 6.4)	12.6	(10.8, 14.5)	36.4	(33.7, 39.1)	42.1	(39.2, 45.0)	3.9	(3.0, 5.1)	100
Female	7.0	(2.3, 19.1)	14.1	(5.8, 30.6)	17.2	(8.7, 31.2)	56.1	(41.2, 69.9)	5.6	(2.0, 15.1)	100
<i>Age (years)</i>											
15-24	4.5	(2.0, 9.7)	9.5	(5.6, 15.8)	44.3	(34.4, 54.6)	37.2	(28.8, 46.4)	4.5	(1.9, 10.4)	100
25-44	4.5	(3.2, 6.3)	13.0	(10.4, 16.0)	36.4	(32.6, 40.3)	42.5	(38.2, 46.9)	3.6	(2.4, 5.5)	100
45-64	5.9	(4.4, 8.0)	14.2	(11.4, 17.4)	33.1	(29.5, 36.8)	42.9	(38.8, 47.1)	3.9	(2.6, 5.7)	100
65+	8.1	(4.4, 14.5)	8.1	(4.5, 14.2)	28.3	(21.2, 36.6)	49.9	(41.7, 58.2)	5.6	(2.6, 11.7)	100
<i>Residence</i>											
Urban	5.6	(3.9, 7.9)	12.4	(9.9, 15.4)	36.8	(33.1, 40.6)	42.2	(38.3, 46.2)	3.1	(1.9, 4.8)	100
Rural	5.0	(3.8, 6.5)	12.7	(10.5, 15.2)	35.5	(32.0, 39.1)	42.5	(38.8, 46.3)	4.4	(3.1, 6.0)	100
<i>Education level<sup>2</sup></i>											
Primary or less	4.3	(2.5, 7.1)	8.8	(6.0, 12.8)	30.9	(24.8, 37.7)	50.1	(43.6, 56.6)	5.9	(3.6, 9.5)	100
Lower secondary	5.2	(3.8, 7.1)	12.6	(10.2, 15.5)	35.5	(32.2, 38.9)	42.8	(39.2, 46.5)	3.9	(2.7, 5.7)	100
Upper secondary	3.1	(1.6, 6.0)	15.9	(11.0, 22.5)	32.3	(26.3, 39.0)	46.4	(38.5, 54.5)	2.3	(1.0, 5.1)	100
College or above	10.0	(6.0, 16.3)	18.4	(12.9, 25.5)	40.1	(32.0, 48.7)	29.2	(22.2, 37.3)	2.3	(0.8, 6.6)	100
<i>Occupation</i>											
Senior officials	8.6	(2.4, 26.2)	26.1	(11.7, 48.4)	48.6	(28.7, 68.9)	13.4	(4.6, 33.5)	3.3	(0.7, 13.8)	100
Professionals	9.2	(3.1, 24.0)	19.0	(9.5, 34.3)	34.0	(20.3, 51.1)	32.9	(19.8, 49.4)	4.9	(0.7, 27.3)	100
Associate professionals	17.0	(8.4, 31.4)	18.3	(9.5, 32.4)	37.9	(23.8, 54.4)	24.6	(14.2, 39.0)	2.2	(0.3, 13.9)	100
Elementary occupations	4.5	(3.3, 6.2)	12.4	(10.1, 15.0)	34.8	(31.2, 38.6)	44.2	(40.4, 48.1)	4.1	(2.8, 5.9)	100
Other occupations	3.8	(2.3, 6.0)	11.5	(8.6, 15.3)	38.9	(33.9, 44.2)	41.5	(36.3, 46.8)	4.3	(2.8, 6.6)	100

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

<sup>2</sup> Education level is reported only among respondents 25+ years old.

## 7.2 Time since quitting smoking

Time since quitting smoking is the number of years between the first day the former daily smoker stopped smoking tobacco and the day of the interview.

**Table 7-2** reports the distribution of time since quitting for former daily smokers aged 15 or older. The time span was divided into four sections: less than 1 year, 1 year to less than 5 years, 5 years to less than 10 years, and, 10 years or more. Among former daily smokers who had quit smoking, those who had quit for 10 years or more made up the largest group (50.4%) and those who had quit for less than 1 year were in the smallest group (10.7%); 22.5% of former daily smokers had quit for less than 5 years.

The pattern of time since quitting smoking was similar across demographic groups.

**Table 7-2: Time since quitting smoking is the number of years between the first day the former daily smoker stopped smoking tobacco smoking and the day of the interview.**

Demographic characteristics	Time since quitting smoking (years) <sup>1</sup>								Total
	<1		1 to <5		5 to <10		≥10		
	<i>Percentage (95% CI)</i>								
<b>Overall</b>	10.7	(8.1, 14.0)	22.5	(19.1, 26.4)	16.4	(13.1, 20.4)	50.4	(45.8, 54.9)	100
<i>Gender</i>									
Male	11.0	(8.3, 14.5)	21.6	(18.2, 25.5)	16.8	(13.4, 21.0)	50.5	(45.8, 55.2)	100
Female	4.2	(0.6, 24.6)	40.6	(24.1, 59.6)	7.9	(1.9, 27.4)	47.3	(29.6, 65.6)	100
<i>Age (years)</i>									
15-24	~	~	~	~	~	~	~	~	100
25-44	15.3	(10.0, 22.7)	31.8	(23.6, 41.2)	25.4	(17.6, 35.1)	27.5	(20.1, 36.5)	100
45-64	8.5	(5.3, 13.4)	17.5	(13.6, 22.3)	13.3	(9.6, 18.1)	60.7	(54.5, 66.5)	100
65+	6.3	(3.0, 12.5)	16.9	(11.7, 24.0)	10.5	(6.4, 16.7)	66.3	(57.8, 73.8)	100
<i>Residence</i>									
Urban	11.3	(7.8, 16.3)	21.1	(16.7, 26.3)	14.3	(10.2, 19.8)	53.2	(47.7, 58.7)	100
Rural	10.3	(7.0, 15.0)	23.4	(18.7, 28.8)	17.6	(13.1, 23.2)	48.7	(42.4, 55.2)	100
<i>Education level<sup>2</sup></i>									
Primary or less	11.0	(5.9, 19.5)	34.7	(24.7, 46.3)	9.6	(4.9, 18.0)	44.7	(34.3, 55.7)	100
Lower secondary	9.8	(6.6, 14.3)	18.1	(14.0, 23.1)	17.9	(13.3, 23.7)	54.2	(47.7, 60.5)	100
Upper secondary	12.5	(6.1, 23.8)	18.1	(11.3, 27.6)	20.7	(11.1, 35.2)	48.8	(37.6, 60.1)	100
College or above	8.6	(4.4, 16.4)	26.3	(17.1, 38.1)	14.4	(8.7, 22.8)	50.7	(40.4, 60.9)	100
<i>Occupation</i>									
Senior officials	~	~	~	~	~	~	~	~	100
Professionals	~	~	~	~	~	~	~	~	100
Associate professionals	11.3	(2.5, 38.6)	38.2	(18.2, 63.3)	19.3	(9.3, 35.9)	31.1	(16.3, 51.2)	100
Elementary occupations	11.8	(7.5, 18.1)	23.3	(18.0, 29.7)	16.5	(11.7, 22.8)	48.4	(41.0, 55.8)	100
Other occupations	13.9	(8.7, 21.4)	22.3	(14.8, 32.1)	17.4	(10.2, 28.1)	46.5	(37.2, 56.0)	100

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

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

### 7.3 Smoking cessation and healthcare-seeking behaviors

Smokers who attempted to quit in the previous 12 months included current tobacco smokers who said they had tried to quit during the previous 12 months and former tobacco smokers who had been abstinent for less than 12 months.

**Table 7-3** reports the proportions of adult smokers who made a quit attempt, visited a healthcare provider (HCP), were asked about smoking, and received advice from an HCP to quit smoking.

#### ***Made quit attempt***

Of current tobacco smokers and former tobacco smokers who said they had quit within the previous 12 months, 39.6% made an attempt to quit in the previous 12 months. The proportion was 39.8% of males and 32.8% of females. Quit attempt was higher in urban areas than in rural areas; however, this difference was not statistically significant. The groups with a primary education had a significantly lower rate of quit attempts than those with a college degree or higher. No significant difference was found among the age groups.

#### ***Visited healthcare providers***

Visiting a healthcare provider is defined as current smokers and recent quitters (<12 months) who visited a doctor or other healthcare provider (HCP) during the previous 12 months for curative or preventive care or counseling services. The rate of visits to an HCP during the previous 12 months was 31.5%. The proportion of smokers who visited an HCP during the previous 12 months was 31.2% for males and 43.4% for females. The rate of visiting healthcare facilities increased with increasing age, and the rate was higher in urban areas than in rural areas. The higher the educational level, the higher the rate of visiting a healthcare facility during the previous 12 months (28.6%, 31.2%, 38.5% and 43.1%).

#### ***Asked about smoking tobacco by an HCP***

Among smokers who visited an HCP during the previous 12 months, 45.6% were asked about their history of tobacco smoking (45.4% of male and 51.1% of female smokers). The age group with the highest proportion of smokers who were asked about smoking was 65 or older (50.8%). The proportion was 49.2% in urban areas and 43.7% in rural areas. By education level, smokers with a college degree or higher had the highest rate of being asked about smoking tobacco by an HCP (48.7%). By occupation, the rates ranged from 35.8% for professionals to 53% for associate professionals.

#### ***Getting healthcare provider's advice to quit tobacco smoking***

The percentage of those getting advice from an HCP to quit smoking is defined as the percentage of current tobacco smokers and recent quitters (abstinent <12 months) who visited a doctor or HCP during the previous 12 months and who were advised to quit smoking. More than one third of all smokers and recent quitters (40.5%) received advice to quit smoking from an HCP during the previous 12 months. The rate of getting advice from an HCP was 40.4% for male smokers and 45.8% for female smokers. The proportion of those receiving advice to quit smoking ranged from 35.0% for smokers aged 25-44 to 46.9% for smokers aged 65 or older. By location, 43.5% of smokers in urban areas and 39.1% of smokers in rural areas received quit advice from an HCP. For smokers with a primary education, the rate of receiving advice to quit smoking was 35.9%, and the rate for smokers with lower secondary education was 45%. By occupation, the rate of getting advice to quit smoking ranged from 30.9% of professionals to 43.9% of associate professionals.

**Table 7-3: Percentage of smokers ≥15 years old who made a quit attempt and received healthcare provider advice in the past 12 months, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Smoking cessation and healthcare seeking behavior							
	Made quit attempt <sup>1</sup>		Visited an HCP <sup>1,2</sup>		Asked by HCP if a smoker <sup>2,3</sup>		Advised to quit by HCP <sup>2,3</sup>	
	Percentage (95% CI)							
<b>Overall</b>	39.6	(37.0, 42.3)	31.5	(29.0, 34.1)	45.6	(41.2, 50.1)	40.5	(36.3, 45.0)
<i>Gender</i>								
Male	39.8	(37.1, 42.5)	31.2	(28.7, 33.9)	45.4	(40.9, 49.9)	40.4	(36.0, 44.8)
Female	32.8	(20.4, 48.2)	43.4	(29.5, 58.4)	51.1	(28.1, 73.7)	45.8	(23.4, 70.1)
<i>Age (years)</i>								
15-24	40.1	(31.5, 49.3)	19.7	(13.1, 28.5)	40.5	(22.0, 62.2)	36.7	(19.0, 59.0)
25-44	37.8	(34.0, 41.8)	26.9	(23.4, 30.7)	40.6	(33.5, 48.2)	35.0	(28.2, 42.4)
45-64	41.7	(37.5, 45.9)	39.2	(35.4, 43.1)	50.7	(44.5, 56.8)	45.7	(39.7, 51.9)
65+	42.5	(34.5, 50.9)	55.1	(47.3, 62.7)	50.8	(39.2, 62.3)	46.9	(35.6, 58.5)
<i>Residence</i>								
Urban	40.4	(36.7, 44.2)	34.1	(30.3, 38.2)	49.2	(43.3, 55.1)	43.5	(37.6, 49.5)
Rural	39.3	(35.9, 42.8)	30.3	(27.2, 33.7)	43.7	(37.8, 49.8)	39.1	(33.4, 45.0)
<i>Education level<sup>4</sup></i>								
Primary or less	32.8	(27.0, 39.1)	28.6	(23.1, 34.8)	43.1	(33.3, 53.4)	35.9	(26.3, 46.8)
Lower secondary	40.5	(36.9, 44.2)	31.2	(28.2, 34.3)	48.3	(41.7, 55.1)	45.0	(38.5, 51.7)
Upper secondary	36.9	(30.1, 44.3)	38.5	(30.9, 46.6)	40.4	(29.6, 52.3)	36.1	(25.7, 47.9)
College or above	49.8	(42.3, 57.3)	43.1	(36.1, 50.3)	48.7	(37.8, 59.8)	39.0	(29.3, 49.8)
<i>Occupation</i>								
Senior officials	46.8	(27.3, 67.3)	55.2	(34.2, 74.4)	~	~	~	~
Professionals	43.8	(28.6, 60.2)	62.6	(47.6, 75.4)	35.8	(20.0, 55.4)	30.9	(16.3, 50.6)
Associate professionals	56.2	(40.7, 70.5)	44.6	(30.2, 60.1)	53.0	(30.3, 74.5)	43.9	(23.8, 66.3)
Elementary occupations	37.2	(33.7, 40.8)	24.8	(21.7, 28.2)	42.2	(35.4, 49.2)	37.3	(30.8, 44.3)
Other occupations	40.3	(35.3, 45.4)	32.0	(27.5, 36.9)	46.6	(38.6, 54.8)	42.2	(34.3, 50.5)

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

<sup>2</sup> HCP = healthcare provider.

<sup>3</sup> Among current smokers and former smokers who have been abstinent for less than 12 months, and who visited a HCP during the past 12 months.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 7-4** presents percentage of smokers aged 15 or older who were asked about their smoking status by healthcare providers and received advice to quit during a 12-month period and its relative change between 2010 and 2015. The table shows that overall, the percentage of smokers who were asked about their smoking status when visiting healthcare facilities increased 30% over the five years. The relative change was significant for smokers who were male (28.6%), were from a rural area (37.3%), or had a lower secondary education (45%). The percentage of smokers who visited healthcare facilities and were advised to stop smoking was up 40.5% in 2015 compared to 2010. The relative change was significant for male smokers (33.8%), those from urban areas (28.8%), those from rural areas (40.8%), and those with a lower secondary education level (60.3%).

**Table 7-4: Percentage of smokers ≥15 years old who were asked by healthcare provider about smoking status and received healthcare provider advice in the past 12 months, by selected demographic characteristics – GATS Viet Nam, 2010 and 2015 and relative change.**

Demographic characteristics	Healthcare provider assistance					
	Asked by HCP whether a smoker <sup>1,2</sup>			Advised to quit by HCP <sup>1,2</sup>		
	2010	2015	Relative change	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	34.9 (30.9, 39.1)	45.6 (41.2, 50.1)	30.7**	29.7 (25.8, 34.0)	40.5 (36.3, 45.0)	36.3**
<i>Gender</i>						
Male	35.3 (31.2, 39.7)	45.4 (40.9, 49.9)	28.6**	30.2 (26.1, 34.5)	40.4 (36.0, 44.8)	33.8**
Female	25.6 (11.8, 46.7)	51.1 (28.1, 73.7)	100.1	20.3 (8.1, 42.4)	45.8 (23.4, 70.1)	125.4
<i>Age (years)</i>						
15-24	16.8 (8.7, 30.0)	40.5 (22.0, 62.2)	141.4	14.9 (7.3, 28.2)	36.7 (19.0, 59.0)	146
25-44	32.5 (26.7, 38.8)	40.6 (33.5, 48.2)	25.1	28.3 (22.7, 34.6)	35.0 (28.2, 42.4)	23.8
45-64	47.5 (40.2, 54.9)	50.7 (44.5, 56.8)	6.6	39.6 (32.5, 47.1)	45.7 (39.7, 51.9)	15.5
≥65	32.6 (22.8, 44.3)	50.8 (39.2, 62.3)	55.8	27.3 (18.3, 38.6)	46.9 (35.6, 58.5)	71.8
<i>Residence</i>						
Urban	40.9 (35.2, 47.0)	49.2 (43.3, 55.1)	20.2	33.8 (28.2, 39.8)	43.5 (37.6, 49.5)	28.8*
Rural	31.8 (26.7, 37.4)	43.7 (37.8, 49.8)	37.3*	27.7 (22.8, 33.4)	39.1 (33.4, 45.0)	40.8*
<i>Education level<sup>3</sup></i>						
Primary or less	36.9 (28.2, 46.6)	43.1 (33.3, 53.4)	16.6	28.9 (21.1, 38.1)	35.9 (26.3, 46.8)	24.5
Lower secondary	33.3 (27.8, 39.4)	48.3 (41.7, 55.1)	45.0**	28.1 (22.8, 34.0)	45.0 (38.5, 51.7)	60.3**
Upper secondary	47.5 (34.9, 60.3)	40.4 (29.6, 52.3)	-14.8	45.9 (33.5, 58.9)	36.1 (25.7, 47.9)	-21.4
College or above	47.1 (37.2, 57.2)	48.7 (37.8, 59.8)	3.5	37.4 (28.0, 47.8)	39.0 (29.3, 49.8)	4.5

<sup>1</sup> Current smokers and former smokers who were abstinent for less than 12 months, and who visited a HCP during the previous 12 months.

<sup>2</sup> HCP = healthcare provider.

<sup>3</sup> Education level is reported only for respondents ≥25 years old.

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

#### 7.4 Cessation methods

Table 7-5 details cessation methods used in the previous 12 months by current smokers who made quit attempts and recent quitters (abstinent <12 months). The methods are displayed in five categories: nicotine replacement therapy (such as the patch), regular chewing gum, prescription medications (e.g. Bupropion, Varenicline), counseling or advice, switching to e-cigarettes, and “other”, which included traditional medicines, switching to smokeless tobacco, and any other reported methods.

In Viet Nam, the method of tobacco cessation most commonly used was quitting without any assistance (71.9%), followed by regular chewing gum (17.3%), nicotine replacement therapy (3.0%), and counseling or advice (2.3%). The proportion of smokers who used traditional medicines or other methods for quitting was 3.1%. Prescription medications and e-cigarette were used at very low rates (0.3% and 0.1%, respectively).

Regular chewing gum was used by 17.5% of male smokers and 8.2% of female smokers who made quit attempts. This method was more commonly used by smokers in urban areas (22.0%) than by those in rural areas (15%). However the difference was not statistically significant. Regular chewing gum was used more by those with college or higher education level than by those at a low education level, and the difference between lower secondary and upper secondary was statistically significant.

The proportion of those using nicotine replacement therapy to quit tobacco smoking was higher for smokers in urban areas (6.0%) than for those in rural areas (1.7%). As education levels increase the use of nicotine replacement therapy becomes more common (6.3% for those with a college degree vs. 1.2%–3% for those without a college degree).

The most common reason given for quitting smoking was “adverse health effects of smoking” (87.2%), followed by “family or friends against smoking” (57.9%) and “high costs of smoking” (53.4%). “Smoking restrictions in indoor public places” were mentioned as the reason to quit smoking by 28.5%, and “society looking down upon smoking” was mentioned by 17.3% of those who made a quit attempt. The pattern of reason to quit smoking was similar for all socioeconomic subgroups Table 7-6.

**Table 7-5: Percentage of smokers ≥15 years old who attempted to quit smoking in the past 12 months, by cessation methods used and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Use of cessation method <sup>1</sup>													
	Nicotine replacement therapy <sup>2</sup>		Regular chewing gum (without nicotine)		Prescription medications		Counseling/advice <sup>3</sup>		Using e-cigarettes		Attempt to quit without assistance		Other <sup>4</sup>	
	<i>Percentage (95% CI)</i>													
<b>Overall</b>	3.0	(1.9, 4.8)	17.3	(14.4, 20.7)	0.3	(0.1, 1.1)	2.3	(1.3, 4.2)	0.1	(0.0, 1.1)	71.9	(67.6, 75.8)	3.1	(2.1, 4.7)
<i>Gender</i>														
Male	3.1	(2.0, 4.9)	17.5	(14.5, 20.9)	0.3	(0.1, 1.2)	2.4	(1.3, 4.3)	0.2	(0.0, 1.1)	72.1	(67.8, 76.0)	3.1	(2.1, 4.7)
Female	0.0	-	8.2	(2.8, 22.1)	0.0	-	0.0	-	0.0	-	63.2	(35.2, 84.4)	2.9	(0.4, 18.9)
<i>Age (years)</i>														
15-24	2.6	(0.6, 10.8)	21.5	(12.3, 34.8)	0.0	-	2.2	(0.4, 10.8)	0.0	-	66.2	(50.3, 79.1)	0.0	-
25-44	3.4	(1.9, 6.1)	19.6	(15.3, 24.7)	0.6	(0.1, 2.4)	2.5	(1.0, 5.8)	0.0	-	77.2	(71.5, 82.0)	2.5	(1.1, 5.3)
45-64	3.3	(1.6, 6.7)	13.1	(9.6, 17.5)	0.0	-	2.7	(1.1, 6.3)	0.5	(0.1, 3.2)	66.5	(60.4, 72.1)	4.7	(2.8, 7.9)
65+	0.0	-	13.7	(6.0, 28.3)	0.0	-	0.0	-	0.0	-	71.7	(58.1, 82.2)	6.3	(2.3, 15.7)
<i>Residence</i>														
Urban	6.0	(3.4, 10.3)	22.2	(17.4, 28.0)	0.5	(0.1, 3.7)	1.7	(0.5, 5.8)	0.0	-	72.9	(67.2, 78.0)	2.3	(1.0, 5.4)
Rural	1.7	(0.8, 3.5)	15.0	(11.5, 19.3)	0.1	(0.0, 1.0)	2.6	(1.3, 5.1)	0.2	(0.0, 1.5)	71.4	(65.7, 76.5)	3.5	(2.2, 5.5)
<i>Education level<sup>5</sup></i>														
Primary or less	1.2	(0.2, 5.3)	17.6	(10.4, 28.1)	0.0	-	0.0	-	0.0	-	73.6	(61.9, 82.7)	4.3	(1.9, 9.1)
Lower secondary	3.0	(1.6, 5.6)	12.3	(9.3, 16.0)	0.6	(0.1, 2.4)	3.5	(1.7, 7.2)	0.3	(0.0, 2.3)	74.3	(69.3, 78.6)	2.6	(1.4, 4.7)
Upper secondary	2.4	(0.7, 8.2)	14.1	(8.1, 23.4)	0.0	-	0.0	-	0.0	-	73.1	(60.5, 82.7)	5.4	(2.0, 13.7)
College or above	6.3	(2.5, 14.8)	33.7	(23.6, 45.7)	0.0	-	3.1	(1.1, 8.1)	0.0	-	66.3	(55.0, 75.9)	4.8	(1.6, 13.4)
<i>Occupation</i>														
Senior officials	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Professionals	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Associate professionals	0.0	-	26.0	(11.5, 48.7)	0.0	-	3.8	(0.5, 22.6)	0.0	-	88.9	(68.9, 96.7)	7.3	(1.0, 36.9)
Elementary occupations	2.1	(1.0, 4.4)	14.2	(10.8, 18.5)	0.3	(0.0, 2.4)	2.5	(1.3, 5.1)	0.0	-	75.4	(69.4, 80.5)	2.5	(1.4, 4.4)
Other occupations	3.8	(1.9, 7.6)	22.6	(16.9, 29.7)	0.3	(0.0, 2.3)	1.4	(0.2, 8.9)	0.5	(0.1, 3.5)	68.8	(60.9, 75.7)	2.1	(0.8, 5.5)

<sup>1</sup> Among current smokers who made a quit attempt in the past 12 months and former smokers who have been abstinent for less than 12 months.

<sup>2</sup> Nicotine replacement therapy such as nicotine patch and nicotine gum.

<sup>3</sup> Includes direct counseling and a telephone quit line/support line.

<sup>4</sup> Other includes traditional medicines, switching to smokeless tobacco, and any other reported methods.

<sup>5</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 7-6: Percentage of smokers ≥15 years old who attempted to quit smoking in the past 12 months, by reasons for quitting/trying to quit and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Reasons for quitting/trying to quit <sup>1</sup>									
	Adverse health effects of smoking		Costs of smoking too much		Family or friends against smoking		Smoking restrictions in indoor public places		Society looking down upon smoking	
	<i>Percentage (95% CI)</i>									
<b>Overall</b>	87.2	(84.1, 89.8)	53.4	(49.1, 57.7)	57.9	(53.9, 61.9)	28.5	(24.9, 32.4)	17.3	(14.6, 20.4)
<i>Gender</i>										
Male	87.4	(84.2, 90.0)	53.6	(49.3, 58.0)	57.9	(53.8, 61.9)	28.7	(25.1, 32.7)	17.3	(14.6, 20.4)
Female	78.8	(55.7, 91.6)	44.0	(21.6, 69.1)	57.8	(33.6, 78.7)	18.5	(5.8, 45.6)	19.0	(6.7, 43.4)
<i>Age (years)</i>										
15-24	77.0	(61.7, 87.5)	56.8	(42.4, 70.2)	61.0	(46.1, 74.0)	27.9	(16.9, 42.6)	16.6	(8.5, 29.8)
25-44	90.7	(86.4, 93.7)	58.1	(51.8, 64.2)	60.6	(54.2, 66.7)	32.5	(26.6, 39.0)	18.8	(14.6, 23.9)
45-64	86.6	(81.2, 90.6)	48.2	(41.2, 55.2)	54.0	(47.7, 60.0)	25.2	(20.3, 30.8)	16.6	(12.6, 21.4)
65+	85.9	(74.1, 92.9)	39.3	(27.6, 52.5)	52.0	(38.5, 65.1)	17.6	(10.3, 28.4)	11.6	(5.7, 22.3)
<i>Residence</i>										
Urban	88.1	(83.6, 91.5)	49.9	(43.5, 56.2)	56.8	(51.1, 62.3)	29.2	(24.2, 34.8)	15.7	(12.0, 20.4)
Rural	86.8	(82.6, 90.1)	55.1	(49.5, 60.6)	58.4	(53.1, 63.6)	28.2	(23.5, 33.4)	18.0	(14.6, 22.0)
<i>Education level<sup>2</sup></i>										
Primary or less	85.0	(76.7, 90.7)	58.8	(49.3, 67.7)	44.0	(34.7, 53.8)	19.5	(12.6, 28.9)	14.6	(8.7, 23.5)
Lower secondary	90.2	(86.4, 93.1)	54.7	(48.7, 60.6)	57.4	(51.6, 63.0)	27.8	(22.8, 33.3)	18.9	(14.9, 23.8)
Upper secondary	90.2	(79.4, 95.6)	42.6	(31.9, 54.1)	59.6	(47.4, 70.7)	28.8	(19.1, 40.8)	18.9	(11.7, 29.1)
College or above	86.3	(76.5, 92.4)	50.2	(39.6, 60.9)	69.9	(59.6, 78.5)	41.0	(30.6, 52.2)	13.6	(8.2, 21.6)
<i>Occupation</i>										
Senior officials	~	~	~	~	~	~	~	~	~	~
Professionals	~	~	~	~	~	~	~	~	~	~
Associate professionals	81.9	(58.5, 93.6)	32.1	(16.7, 52.8)	64.6	(44.2, 80.8)	27.4	(13.7, 47.1)	5.0	(1.5, 15.6)
Elementary occupations	89.1	(85.0, 92.1)	56.6	(50.8, 62.3)	58.4	(52.8, 63.8)	27.3	(22.5, 32.6)	21.3	(16.9, 26.5)
Other occupations	85.1	(78.3, 90.0)	55.4	(47.3, 63.2)	55.7	(47.9, 63.3)	31.1	(24.3, 38.9)	13.5	(9.6, 18.7)

<sup>1</sup> Among current smokers who made a quit attempt in the past 12 months and former smokers who have been abstinent for less than 12 months.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.



## 8. Economics

### 8.1 Last brand of manufactured cigarettes purchased

GATS 2015 asked respondents to report the brand name of the last cigarette product purchased. The five most frequently purchased brands were Thang Long (19.3%), Hero (10.5%), Jet (8.1%), Craven (6.2%), and Basto (5.0%). Of the five most popular cigarette brands, Thang Long, Craven, and Basto are local products, and Jet and Hero are smuggled into Viet Nam (**Table 8-1**). Thang Long was especially popular among males (19.5%), 15-24 year olds (22.7%), and smokers with upper secondary (24.5%) or college education (29.9%).

**Table 8-1: Percentage of current manufactured cigarette smokers ≥15 years, by last brand purchased and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Last cigarette brand purchased									
	Thang Long		Hero		Jet		Craven		Basto	
	<i>Percentage (95% CI)</i>									
<b>Overall</b>	19.3	(16.2, 23.0)	10.5	(8.1, 13.6)	8.1	(6.3, 10.4)	6.2	(4.7, 8.1)	5.0	(3.5, 7.1)
<i>Gender</i>										
Male	19.5	(16.3, 23.1)	10.6	(8.1, 13.7)	8.2	(6.4, 10.5)	6.3	(4.8, 8.3)	5.0	(3.5, 7.2)
Female	11.2	(2.2, 41.7)	5.8	(1.9, 16.6)	3.1	(0.4, 19.4)	1.0	(0.1, 7.1)	3.0	(0.9, 9.4)
<i>Age (years)</i>										
15-24	22.7	(14.4, 33.8)	9.4	(4.5, 18.6)	8.9	(5.4, 14.4)	9.9	(5.3, 17.7)	5.0	(1.2, 18.0)
25-44	19.6	(15.7, 24.3)	11.9	(8.5, 16.4)	8.7	(6.2, 12.0)	6.5	(4.6, 9.2)	4.8	(3.0, 7.6)
45-64	18.4	(14.7, 22.8)	8.5	(5.9, 12.1)	7.2	(5.1, 10.2)	4.1	(2.6, 6.4)	6.1	(3.8, 9.5)
65+	12.2	(7.0, 20.5)	11.2	(6.2, 19.5)	5.1	(2.1, 11.6)	4.5	(1.8, 11.1)	0.0	-
<i>Residence</i>										
Urban	16.3	(12.6, 20.9)	9.3	(6.8, 12.6)	12.6	(9.7, 16.2)	12.1	(8.9, 16.2)	3.3	(1.8, 6.1)
Rural	21.0	(16.6, 26.2)	11.2	(7.8, 15.8)	5.6	(3.6, 8.8)	2.9	(1.6, 5.2)	5.9	(3.8, 9.0)
<i>Education level<sup>1</sup></i>										
Primary or less	6.1	(3.4, 10.7)	17.3	(11.5, 25.2)	3.8	(2.0, 6.9)	1.3	(0.4, 3.8)	6.6	(3.5, 12.1)
Lower secondary	18.9	(15.3, 23.1)	10.1	(6.5, 15.3)	10.1	(7.5, 13.6)	5.3	(3.7, 7.7)	6.1	(4.0, 9.2)
Upper secondary	24.5	(17.6, 33.1)	10.0	(5.5, 17.3)	7.3	(3.7, 13.8)	5.7	(3.5, 9.1)	2.7	(1.1, 6.6)
College or above	29.9	(22.0, 39.2)	4.4	(1.5, 12.4)	7.0	(3.8, 12.6)	12.5	(7.1, 21.1)	1.1	(0.4, 3.5)
<i>Occupation</i>										
Senior officials	~	~	~	~	~	~	~	~	~	~
Professionals	24.8	(11.8, 44.9)	0.0	-	6.3	(2.0, 18.3)	22.6	(10.3, 42.5)	1.9	(0.5, 7.5)
Associate professionals	25.5	(14.0, 41.7)	7.1	(2.5, 19.0)	20.0	(8.1, 41.6)	1.0	(0.1, 7.1)	0.6	(0.1, 4.3)
Elementary occupations	17.2	(13.4, 21.8)	11.4	(7.9, 16.3)	6.0	(4.4, 8.3)	4.3	(2.7, 6.7)	7.3	(4.7, 11.1)
Other occupations	24.0	(18.8, 30.1)	10.0	(6.7, 14.7)	10.9	(7.6, 15.3)	6.9	(4.5, 10.5)	2.9	(1.7, 5.1)

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

<sup>1</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

### 8.2 Source of last purchase of cigarettes by manufactured-cigarette smokers

**Table 8-2** presents data on the source of the last purchase of manufactured cigarettes by current manufactured-cigarette smokers. The most common source was shops/kiosks (68.4%), followed by tea stalls/street vendors (28.8%). Few smokers of manufactured cigarettes purchased their cigarettes at duty-free shops (1.8%), through the Internet (0.0%), or from other sources (1%).

Purchasing cigarettes from a shop/kiosk was more common for female smokers (89.9%) than that for male smokers (68%) and purchasing cigarettes from tea stall/street vendor was more common for male smokers (29.2%) than for female smokers (10.2%). There was little difference in the source of the last purchase of cigarettes by age group or by location of residence.

**Table 8-2: Percentage distribution of manufactured cigarette smokers ≥15 years, by the source of last purchase of cigarettes and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Source of Last Purchase of Cigarettes										Total
	Shop/Kiosk		Tea Stall/Street vendor		Duty-free shop		Internet		Other <sup>1</sup>		
	<i>Percentage (95% CI)</i>										
<b>Overall</b>	68.4	(64.5, 72.1)	28.8	(25.2, 32.7)	1.8	(1.1, 2.8)	0.0	-	1.0	(0.6, 1.8)	100
<i>Gender</i>											
Male	68.0	(64.1, 71.7)	29.2	(25.5, 33.1)	1.8	(1.1, 2.8)	0.0	-	1.0	(0.6, 1.8)	100
Female	89.8	(79.0, 95.4)	10.2	(4.6, 21.0)	0.0	-	0.0	-	0.0	-	100
<i>Age (years)</i>											
15-24	65.8	(53.9, 75.9)	33.0	(22.9, 44.8)	1.3	(0.3, 5.3)	0.0	-	0.0	-	100
25-44	68.9	(63.6, 73.8)	28.7	(23.8, 34.0)	1.6	(0.8, 3.1)	0.0	-	0.8	(0.3, 2.2)	100
45-64	69.2	(64.2, 73.9)	26.7	(22.6, 31.3)	2.0	(0.9, 4.6)	0.0	-	2.0	(1.0, 3.9)	100
65+	66.1	(54.6, 75.9)	30.9	(21.4, 42.4)	3.0	(0.9, 9.6)	0.0	-	0.0	-	100
<i>Residence</i>											
Urban	69.9	(65.1, 74.3)	27.3	(23.0, 31.9)	1.5	(0.7, 3.3)	0.0	-	1.3	(0.6, 2.8)	100
Rural	67.6	(62.1, 72.6)	29.7	(24.7, 35.2)	1.9	(1.1, 3.3)	0.0	-	0.9	(0.4, 1.9)	100
<i>Education level<sup>2</sup></i>											
Primary or less	69.8	(62.2, 76.5)	27.0	(20.6, 34.6)	2.7	(1.1, 6.3)	0.0	-	0.4	(0.1, 1.8)	100
Lower secondary	67.4	(62.1, 72.3)	30.7	(25.8, 36.0)	0.9	(0.4, 2.1)	0.0	-	1.0	(0.5, 2.2)	100
Upper secondary	70.0	(61.6, 77.2)	27.2	(20.2, 35.6)	1.8	(0.4, 7.4)	0.0	-	1.0	(0.2, 4.1)	100
College or above	71.5	(63.3, 78.5)	21.2	(15.1, 29.0)	4.1	(1.6, 9.7)	0.0	-	3.2	(1.1, 9.0)	100
<i>Occupation</i>											
Senior officials	~	~	~	~	~	~	~	~	~	~	100
Professionals	41.7	(26.2, 59.1)	35.6	(20.3, 54.4)	7.8	(1.7, 29.2)	0.0	-	14.9	(4.9, 37.1)	100
Associate professionals	83.9	(71.2, 91.7)	13.5	(6.8, 25.1)	2.6	(0.4, 16.1)	0.0	-	0.0	-	100
Elementary occupations	66.2	(61.2, 70.9)	31.7	(27.0, 36.8)	1.7	(0.9, 3.2)	0.0	-	0.5	(0.2, 1.1)	100
Other occupations	72.4	(66.7, 77.5)	25.4	(20.4, 31.1)	1.5	(0.6, 3.6)	0.0	-	0.7	(0.2, 2.3)	100

<sup>1</sup> Other includes the categories Abroad, From another person, and any other specified sources.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

### 8.3 Cigarette expenditure

**Table 8-3: Average cigarette expenditure per month among manufactured cigarette smokers ≥15 years, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Cigarette expenditure per month			
	(Vietnamese dong in thousands)			
	Average (95% CI)		Median (95% CI)	
<b>Overall</b>	221.4	(204.6, 238.2)	181.3	(164.3, 182.5)
<i>Gender</i>				
Male	222.3	(205.3, 239.3)	181.3	(166.8, 182.5)
Female	170.0	(108.2, 231.9)	97.0	(63.8, 203.3)
<i>Age (years)</i>				
15-24	197.4	(164.9, 230.0)	167.6	(138.5, 209.6)
25-44	239.9	(210.3, 269.5)	181.7	(174.5, 218.9)
45-64	213.3	(196.0, 230.7)	170.3	(152.0, 189.4)
65+	144.1	(119.0, 169.1)	118.6	(85.2, 136.8)
<i>Residence</i>				
Urban	291.4	(251.3, 331.5)	235.1	(220.6, 257.4)
Rural	182.4	(168.3, 196.5)	150.9	(144.6, 182.3)
<i>Education level<sup>1</sup></i>				
Primary or less	194.3	(172.2, 216.4)	179.7	(136.5, 200.7)
Lower secondary	233.2	(199.6, 266.7)	174.9	(157.5, 182.4)
Upper secondary	240.5	(207.6, 273.5)	182.1	(151.3, 223.1)
College or above	223.0	(194.4, 251.5)	182.2	(146.2, 238.9)
<i>Occupation</i>				
Senior officials	~	~	~	~
Professionals	270.0	(200.6, 339.5)	230.6	(119.9, 289.4)
Associate professionals	219.7	(175.1, 264.2)	181.7	(150.7, 270.5)
Elementary occupations	198.4	(183.5, 213.3)	164.9	(148.1, 189.6)
Other occupations	274.3	(226.6, 322.0)	209.5	(188.4, 238.8)

<sup>1</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

**Table 8-3** presents information on monthly expenditures for manufactured cigarettes among manufactured-cigarette smokers who were 15 years old or older. On average, a current manufactured-cigarette smoker spent VND 221,400 per month (around US\$ 11). The median cigarette expenditure per month was VND 181,300 (around US\$ 8). Male manufactured-cigarette smokers spent VND 222,300 per month and females spent VND 170,000 per month. By age, spending on manufactured cigarettes ranged from VND 144,000 per month for smokers aged 65 years or older to VND 239,900 per month for smokers aged 25-44. Urban current smokers spent more on manufactured cigarettes than rural smokers (VND 291,400 per month vs. VND 182,400 per month, respectively). By education, the highest average spending on manufactured cigarettes was by smokers with upper secondary education (VND 223,000) and the lowest was by smokers with primary education or lower (VND 194,300). By occupation, spending on manufactured cigarettes ranged from VND 198,400 for those with elementary occupations to VND 274,300 for those in the “other occupations” group.

**Table 8-4: Average cigarette expenditure per month among manufactured-cigarette smokers ≥15 years, by selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Cigarette expenditure per month (Vietnamese dong in thousands)				Relative change	
	2010 <sup>1</sup>		2015		Average	Median
	Average (95% CI)	Median (95% CI)	Average (95% CI)	Median (95% CI)	Percentage	
<b>Overall</b>	216.3 (201.7, 230.8)	146.3 (133.1, 161.4)	221.4 (204.6, 238.2)	181.3 (164.3, 182.5)	2.4	23.9***
<i>Gender</i>						
Male	217.9 (203.1, 232.7)	146.3 (135.7, 162.2)	222.3 (205.3, 239.3)	181.3 (166.8, 182.5)	2.0	23.9***
Female	155.9 (83.7, 228.1)	66.9 (26.1, 138.3)	170.0 (108.2, 231.9)	97.0 (63.8, 203.3)	9.1	45.1
<i>Age (years)</i>						
15-24	190.8 (148.9, 232.7)	134.4 (94.3, 167.8)	197.4 (164.9, 230.0)	167.6 (138.5, 209.6)	3.5	24.6
25-44	225.2 (206.4, 244.1)	154.5 (137.1, 186.2)	239.9 (210.3, 269.5)	181.7 (174.5, 218.9)	6.5	17.6
45-64	227.4 (199.9, 255.0)	145.0 (124.7, 173.1)	213.3 (196.0, 230.7)	170.3 (152.0, 189.4)	-6.2	17.5
65+	128.8 (103.9, 153.8)	94.2 (70.8, 123.0)	144.1 (119.0, 169.1)	118.6 (85.2, 136.8)	11.8	25.9
<i>Residence</i>						
Urban	288.9 (265.3, 312.5)	227.9 (195.5, 252.2)	291.4 (251.3, 331.5)	235.1 (220.6, 257.4)	0.9	3.2
Rural	177.7 (159.8, 195.7)	120.6 (110.9, 140.1)	182.4 (168.3, 196.5)	150.9 (144.6, 182.3)	2.6	25.1*
<i>Education level<sup>2</sup></i>						
Primary or less	200.0 (172.0, 228.0)	131.2 (118.3, 173.3)	194.3 (172.2, 216.4)	179.7 (136.5, 200.7)	-2.9	37
Lower secondary	205.2 (187.6, 222.8)	140.5 (123.3, 163.1)	233.2 (199.6, 266.7)	174.9 (157.5, 182.4)	13.7	24.6*
Upper secondary	288.9 (241.6, 336.3)	181.9 (144.6, 235.6)	240.5 (207.6, 273.5)	182.1 (151.3, 223.1)	-16.70	0.1
College or above	269.6 (224.1, 315.1)	182.5 (152.5, 237.2)	223.0 (194.4, 251.5)	182.2 (146.2, 238.9)	-17.30	-0.2

<sup>1</sup> In adjusted constant 2015 Vietnamese dong.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

**Table 8-4** presents expenditure for cigarettes in 2010 and 2015 and its relative change. All numbers in 2010 were adjusted by using adjusted constant of 2015 Vietnamese dong. The table shows that, in general, the cigarette expenditures did not significantly increase. Among education groups, the median cigarette expenditure significantly increased only for those with upper secondary education (relative change was 24.6%).

**Table 8-5: Amount paid for 20 manufactured cigarettes among manufactured-cigarette smokers ≥15 years old, by selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Amount paid for 20 manufactured cigarettes (Vietnamese dong in thousands)				Relative change	
	2010 <sup>1</sup>		2015		Average	Median
	Average (95% CI)	Median (95% CI)	Average (95% CI)	Median (95% CI)	Percentage	
<b>Overall</b>	12.7 (12.1, 13.3)	8.0 (8.0, 9.3)	11.8 (11.0, 12.6)	9.6 (8.9, 9.7)	-7.2	19.4***
<i>Gender</i>						
Male	12.8 (12.1, 13.4)	8.2 (7.9, 9.3)	11.8 (11.0, 12.7)	9.6 (8.9, 9.7)	-7.2	17.5**
Female	11.8 (8.2, 15.4)	6.9 (6.3, 7.9)	10.8 (8.3, 13.3)	8.8 (6.7, 9.7)	-7.9	27.7*
<i>Age (years)</i>						
15-24	15.4 (13.4, 17.4)	13.1 (9.3, 18.3)	11.7 (10.2, 13.2)	9.4 (7.7, 10.0)	-24.1***	-28.1*
25-44	13.0 (12.2, 13.9)	8.1 (7.9, 9.5)	12.7 (11.2, 14.1)	9.7 (9.5, 9.9)	-2.6	19.7**
45-64	11.5 (10.6, 12.3)	7.9 (7.9, 8.0)	10.8 (10.1, 11.5)	8.5 (7.9, 9.6)	-5.5	7.1
65+	10.2 (8.7, 11.8)	6.4 (6.3, 7.5)	9.0 (7.7, 10.2)	7.0 (6.0, 8.1)	-12.7	9.0
<i>Residence</i>						
Urban	16.6 (15.7, 17.5)	16.0 (15.3, 18.9)	15.6 (13.5, 17.6)	14.4 (11.0, 16.7)	-6.1	-9.9
Rural	10.6 (9.9, 11.3)	7.9 (7.9, 8.0)	9.7 (9.2, 10.3)	7.8 (7.4, 8.8)	-8.3*	-1.1
<i>Education level<sup>2</sup></i>						
Primary or less	9.5 (8.6, 10.3)	7.1 (6.4, 7.9)	9.4 (8.6, 10.2)	7.6 (6.9, 9.4)	-0.3	6.6
Lower secondary	12.0 (11.4, 12.7)	8.0 (7.9, 8.5)	12.0 (10.3, 13.6)	9.6 (7.9, 9.8)	-0.6	19.8**
Upper secondary	16.3 (14.6, 18.0)	15.3 (8.0, 20.6)	13.1 (11.8, 14.4)	9.5 (8.8, 10.4)	-19.9***	-37.9**
College or above	19.0 (17.1, 20.9)	20.7 (18.7, 22.1)	14.1 (12.6, 15.7)	10.3 (9.5, 16.8)	-25.4***	-50.2***

<sup>1</sup> In adjusted constant 2015 Vietnamese dong.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

**Table 8-5** presents amount paid for 20 manufactured cigarettes in Vietnamese dong in 2010 and 2015. The values for 2010 Vietnamese dong were adjusted by using constant 2015 Vietnamese dong. The average amount paid for 20 manufactured cigarettes did not change. Thus, estimate of the cost of 100 manufactured cigarettes as a percentage of GDP per capita in 2010 was 2.7%; by 2015 it dropped 2.0%.

## 9. Media

### 9.1 Awareness of anti-cigarette smoking information

#### ***Overall population awareness of anti-smoking information in various media sources***

This section covers the degree of public awareness of anti-cigarette smoking information in news and social media and displayed in public places. "Media" include newspapers or magazines, television, radio, billboards, Internet, local radio and loudspeakers, posters, leaflets or pamphlets, and any other ways of disseminating information.

The main indicator used in this section is percentage of respondents who reported having noticed information about the dangers of smoking cigarettes or notices that encouraged quitting, through channels such as newspapers or magazines, television, radio, or billboards during the previous 30 days.

Table 9-1 shows that 75.3% of adults aged 15 years or older noticed anti-smoking information that was broadcast through the media or displayed in public places. Television was mentioned by the largest number of adults (64.5%), following by billboards (26.8%), local radio or loudspeaker (21.1%), and posters (16.3%). The proportion of adults noticing anti-smoking information from leaflets or pamphlets was lowest (3.6%).

The pattern was similar for males and females. The pattern did not differ by age group, except that noticing anti-smoking information on the Internet was more common among the youngest age group (15-24 year olds) (30.3%) than among those who were 25 or older (12.8%). Meanwhile those aged 25 or older reported noticing anti-smoking information more often than the youngest age group from radio (10.1% vs. 5.6%) and from loudspeakers (22.1% vs. 17.9%).

Those who lived in urban areas reported higher percentages of noticing anti-smoking information than did those in rural areas: from any source (77.3% vs. 74.3%), newspapers or magazines (28.1% vs. 17.1%), billboards 35.2% vs. 22.5%), the Internet (26.2% vs. 12.0%), and posters (23.4% vs. 12.7%). In contrast, those living in the rural areas reported higher percentages of noticing anti-smoking information from local radio or loudspeakers (22.5% vs. 18.4%).

#### ***Current smokers' awareness of anti-smoking information from various media sources***

The proportion of current smokers who noticed anti-smoking information from any source was 75.3%. The proportion of current smokers who noticed anti-smoking information from various media sources were similar to those for the overall population. Female smokers had less access to anti-smoking information from all types of media than male smokers did. The proportion of female smokers who noticed anti-smoking information from any source was 47%, but the proportion of male smokers was 76.1%.

Generally, the proportion of smokers in the 15-24 age group who noticed anti-smoking information from any source was lower than for those who were at least 25 years old (67.9% vs. 76.4%). However this difference was not statistically significant. The higher percentage of getting anti-smoking information from the Internet by the youngest age group (15-24 years) was the only significant difference observed (25.7% vs. 10.5% for the age group 25 and older).

The proportion of urban smokers who noticed anti-smoking information from any source tended to be higher than the proportion in rural areas (77.3% vs. 74.3%), an insignificant difference. More smokers in urban areas than in rural areas noticed anti-smoking information in newspaper or in magazines (28.1% vs. 15.2%), on posters (22.7% vs. 14.4), on the Internet (21.7% vs. 8.3%), on billboards (35.4% vs. 22.9%), and in leaflets (6.0% vs. 1.7%).

#### ***Non-smokers' awareness of anti-smoking information in various media sources***

Among non-smokers, 75.3% noticed anti-smoking information from any source. The pattern of non-smokers' awareness of anti-smoking information from different media sources was consistent with the overall pattern of awareness. Male non-smokers were more likely to report noticing anti-smoking information from news magazines (24.4% vs. 19.7%) and the Internet (22.5% vs. 15.8%) than were female non-smokers.

A higher proportion of non-smokers aged 25 or older than non-smokers younger than 25 noticed anti-smoking information on the Internet (30.9% vs. 13.6%), but they were less likely to report noticing anti-smoking information on television (59.7% vs. 65.7%), on the radio (5.2% vs. 9.7%), or local loudspeakers (17.6% vs. 22.6%). Urban non-smokers were more likely than rural non-smokers to notice anti-smoking information in newspapers or magazines (28.1% vs.

17.7%), on billboards (35.2% vs. 22.4%), on the Internet (27.3% vs. 13.2%), on posters (23.6% vs. 12.2%), or on leaflets or pamphlets (6.7% vs. 2.2%); non-smokers living in rural areas were more likely than urban non-smokers to notice anti-smoking information on loudspeakers (23.0% vs. 18.1%).

***Awareness of anti-smoking information in various media sources – comparison between GATS 2010 and 2015***

Table 9-1 also presents the percentage of adults  $\geq 15$  years old who noticed anti-cigarette smoking information in various places during the 30 days before GATS 2010 and GATS 2015, by smoking status, and it also shows the relative change from the 2010 to the 2015 survey. The percentages of adults  $\geq 15$  years who noticed anti-cigarette information in almost any place except the Internet decreased significantly. The drop ranged from 18.0% overall and for current smokers and current non-smokers (from any source) to 67.7% overall, 60.7% for current smokers, and 69.8% for current non-smokers (from radio). The Internet was the only source of such information that was more accessible in 2015 than in 2010. Relative changes in percentage of adults aged 15 or older who noticed anti-cigarette smoking information were 40.3% (overall), 50.3% (current smokers) and 37.6% (current non-smokers).

**Table 9-1: Percentage of adults ≥15 years who noticed anti-cigarette smoking information during the last 30 days in various places, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Places	Overall		Gender		Age (years)				Residence					
			Male	Female	15-24		25+	Urban	Rural					
<i>Percentage (95% CI)</i>														
<b>Overall</b>														
In newspapers or in magazines	20.8	(19.6, 22.2)	22.3	(20.4, 24.2)	19.5	(18.0, 21.1)	24.7	(21.6, 28.2)	19.7	(18.4, 21.0)	28.1	(26.1, 30.2)	17.1	(15.5, 18.9)
On television or the radio	65.3	(63.7, 67.0)	65.9	(63.5, 68.1)	64.9	(63.0, 66.7)	60.0	(56.0, 63.8)	67.0	(65.4, 68.5)	64.2	(62.2, 66.3)	65.9	(63.6, 68.2)
On television	64.5	(62.8, 66.2)	64.9	(62.5, 67.2)	64.1	(62.2, 66.0)	59.3	(55.4, 63.1)	66.0	(64.4, 67.7)	63.8	(61.7, 65.8)	64.9	(62.5, 67.2)
On the radio	9.0	(8.2, 9.9)	10.1	(9.0, 11.3)	8.1	(7.1, 9.2)	5.6	(4.2, 7.4)	10.1	(9.2, 11.0)	8.7	(7.7, 10.0)	9.2	(8.1, 10.4)
On billboards	26.8	(25.3, 28.4)	28.2	(26.2, 30.3)	25.5	(23.7, 27.4)	29.2	(26.0, 32.6)	26.1	(24.6, 27.6)	35.2	(33.0, 37.6)	22.5	(20.6, 24.5)
Internet	16.8	(15.7, 18.0)	18.0	(16.4, 19.8)	15.7	(14.3, 17.2)	30.3	(27.0, 33.8)	12.8	(11.7, 13.9)	26.2	(24.2, 28.2)	12.0	(10.6, 13.6)
Local loudspeakers	21.1	(19.7, 22.6)	19.6	(17.9, 21.4)	22.6	(20.8, 24.4)	17.9	(15.3, 20.8)	22.1	(20.6, 23.6)	18.4	(16.7, 20.2)	22.5	(20.6, 24.5)
Poster	16.3	(15.1, 17.6)	17.5	(15.9, 19.3)	15.1	(13.7, 16.7)	17.1	(14.6, 19.9)	16.1	(14.8, 17.4)	23.4	(21.6, 25.3)	12.7	(11.1, 14.4)
Leaflet	3.6	(3.1, 4.2)	3.5	(2.8, 4.3)	3.7	(3.1, 4.4)	4.6	(3.4, 6.2)	3.3	(2.8, 3.9)	6.5	(5.5, 7.7)	2.1	(1.6, 2.8)
Somewhere else	1.7	(1.4, 2.1)	1.4	(1.0, 1.9)	2.0	(1.5, 2.6)	2.4	(1.5, 3.6)	1.5	(1.2, 1.9)	2.4	(1.9, 3.2)	1.3	(0.9, 1.9)
Any location	75.3	(73.8, 76.8)	76.3	(74.3, 78.3)	74.4	(72.5, 76.2)	74.4	(70.5, 77.9)	75.6	(74.1, 77.0)	77.3	(75.6, 78.9)	74.3	(72.1, 76.4)
<b>Current smokers<sup>1</sup></b>														
In newspapers or in magazines	19.2	(17.0, 21.7)	19.6	(17.3, 22.1)	3.7	(1.5, 9.2)	23.9	(16.5, 33.4)	18.5	(16.3, 21.0)	28.1	(24.5, 32.1)	15.2	(12.6, 18.3)
On television or the radio	66.8	(63.7, 69.7)	67.4	(64.5, 70.2)	42.9	(26.5, 61.0)	58.6	(48.5, 68.0)	68.0	(65.1, 70.8)	63.6	(59.0, 68.0)	68.2	(64.2, 71.9)
On television	65.8	(62.7, 68.7)	66.4	(63.4, 69.2)	42.2	(25.9, 60.3)	56.6	(46.6, 66.1)	67.2	(64.2, 70.0)	63.0	(58.4, 67.3)	67.1	(63.1, 70.8)
On the radio	10.9	(9.3, 12.7)	11.1	(9.5, 13.0)	2.6	(0.8, 7.7)	8.2	(4.1, 15.4)	11.3	(9.6, 13.2)	11.1	(9.1, 13.7)	10.8	(8.7, 13.3)
On billboards	26.8	(24.2, 29.6)	27.1	(24.4, 29.8)	17.5	(8.0, 33.9)	25.3	(17.7, 34.9)	27.0	(24.5, 29.7)	35.4	(31.3, 39.8)	22.9	(19.8, 26.4)
Internet	12.4	(10.6, 14.5)	12.6	(10.8, 14.8)	5.2	(0.7, 28.9)	25.7	(18.6, 34.5)	10.5	(8.7, 12.5)	21.7	(18.2, 25.7)	8.3	(6.3, 10.7)
Local loudspeakers	20.5	(18.2, 23.0)	20.6	(18.3, 23.1)	19.3	(9.9, 34.0)	19.5	(13.3, 27.7)	20.7	(18.4, 23.2)	19.6	(16.5, 23.1)	21.0	(18.0, 24.3)
Poster	17.0	(14.7, 19.5)	17.2	(14.9, 19.7)	8.8	(3.3, 21.3)	17.7	(11.0, 27.3)	16.9	(14.7, 19.3)	22.7	(19.3, 26.5)	14.4	(11.6, 17.7)
Leaflet	3.0	(2.2, 4.1)	3.1	(2.2, 4.1)	2.3	(0.5, 9.0)	3.2	(1.4, 7.1)	3.0	(2.2, 4.2)	6.0	(4.2, 8.4)	1.7	(1.0, 3.0)
Somewhere else	1.2	(0.8, 1.8)	1.1	(0.7, 1.8)	3.8	(0.9, 14.7)	0.3	(0.0, 2.3)	1.3	(0.8, 2.1)	2.3	(1.3, 3.8)	0.7	(0.3, 1.5)
Any location	75.3	(72.4, 78.1)	76.1	(73.3, 78.6)	47.0	(29.5, 65.2)	67.9	(57.7, 76.6)	76.4	(73.7, 79.0)	76.4	(72.6, 79.7)	74.9	(70.9, 78.5)
<b>Non-smokers<sup>2</sup></b>														
In newspapers or in magazines	21.3	(20.0, 22.8)	24.4	(22.1, 27.0)	19.7	(18.2, 21.3)	24.8	(21.5, 28.5)	20.1	(18.8, 21.5)	28.1	(26.0, 30.3)	17.7	(16.0, 19.6)
On television or the radio	64.9	(63.2, 66.6)	64.6	(61.5, 67.5)	65.1	(63.2, 66.9)	60.2	(56.1, 64.0)	66.6	(64.9, 68.3)	64.4	(62.3, 66.5)	65.2	(62.8, 67.5)
On television	64.1	(62.4, 65.9)	63.7	(60.6, 66.6)	64.4	(62.5, 66.2)	59.7	(55.7, 63.6)	65.7	(63.9, 67.4)	64.0	(61.9, 66.1)	64.2	(61.7, 66.6)
On the radio	8.5	(7.6, 9.5)	9.2	(7.8, 10.9)	8.1	(7.1, 9.2)	5.2	(3.8, 7.1)	9.7	(8.7, 10.7)	8.1	(6.9, 9.5)	8.7	(7.6, 10.0)
On billboards	26.8	(25.2, 28.5)	29.1	(26.6, 31.8)	25.6	(23.8, 27.5)	29.8	(26.4, 33.3)	25.8	(24.1, 27.4)	35.2	(32.8, 37.6)	22.4	(20.3, 24.5)
Internet	18.1	(16.8, 19.4)	22.5	(20.2, 25.0)	15.8	(14.4, 17.3)	30.9	(27.5, 34.6)	13.6	(12.5, 14.8)	27.3	(25.2, 29.5)	13.2	(11.6, 15.0)
Local loudspeakers	21.3	(19.8, 22.9)	18.8	(16.6, 21.2)	22.6	(20.9, 24.5)	17.6	(14.8, 20.8)	22.6	(21.0, 24.3)	18.1	(16.3, 20.0)	23.0	(20.9, 25.3)
Poster	16.1	(14.8, 17.5)	17.8	(15.8, 20.1)	15.2	(13.8, 16.8)	17.0	(14.4, 19.8)	15.8	(14.5, 17.2)	23.6	(21.6, 25.7)	12.2	(10.6, 13.9)
Leaflet	3.8	(3.2, 4.4)	3.8	(2.8, 5.2)	3.7	(3.2, 4.4)	4.8	(3.4, 6.7)	3.4	(2.9, 4.0)	6.7	(5.6, 8.0)	2.2	(1.7, 3.0)
Somewhere else	1.8	(1.5, 2.3)	1.6	(1.1, 2.4)	2.0	(1.5, 2.6)	2.7	(1.7, 4.1)	1.6	(1.2, 2.0)	2.5	(1.9, 3.3)	1.5	(1.1, 2.2)
Any location	75.3	(73.7, 76.9)	76.5	(73.8, 79.1)	74.7	(72.9, 76.4)	75.3	(71.6, 78.7)	75.3	(73.7, 76.9)	77.6	(75.8, 79.2)	74.1	(71.9, 76.3)

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



## 9.2 Noticing health warning label on cigarette packets and considering quitting among smokers

**Table 9-2: Percentage of current smokers  $\geq 15$  years who noticed health warnings on cigarette packages and considered quitting because of the warning labels during the last 30 days, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Current smokers <sup>1</sup> who...			
	Noticed health warnings on cigarette package <sup>2</sup>		Thought about quitting because of warning label <sup>2</sup>	
	Percentage (95% CI)			
<b>Overall</b>	91.1	(89.2, 92.7)	48.5	(45.5, 51.5)
<i>Gender</i>				
Male	91.5	(89.7, 93.1)	49.0	(46.0, 52.0)
Female	73.0	(54.8, 85.8)	31.0	(17.7, 48.4)
<i>Age (years)</i>				
15-24	91.3	(82.9, 95.8)	49.3	(39.4, 59.3)
25-44	92.3	(89.5, 94.4)	50.0	(45.9, 54.2)
45-64	90.9	(88.4, 92.9)	48.9	(44.8, 53.0)
65+	81.7	(73.2, 87.9)	32.9	(25.6, 41.0)
<i>Residence</i>				
Urban	93.2	(90.7, 95.0)	50.9	(46.8, 54.9)
Rural	90.2	(87.5, 92.3)	47.5	(43.6, 51.4)
<i>Education level<sup>3</sup></i>				
Primary or less	82.0	(75.9, 86.9)	42.4	(36.3, 48.8)
Lower secondary	91.6	(89.3, 93.4)	49.7	(45.8, 53.6)
Upper secondary	96.3	(92.4, 98.3)	44.3	(36.9, 51.9)
College or above	96.8	(93.3, 98.5)	57.4	(49.7, 64.9)
<i>Occupation</i>				
Senior officials	94.7	(70.4, 99.3)	62.5	(40.5, 80.4)
Professionals	94.0	(76.5, 98.7)	55.3	(39.1, 70.5)
Associate professionals	99.5	(96.2, 99.9)	67.2	(52.1, 79.4)
Elementary occupations	89.5	(86.5, 91.9)	48.5	(44.4, 52.6)
Other occupations	94.2	(91.2, 96.2)	47.6	(42.6, 52.7)

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

<sup>2</sup> During the last 30 days.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 9-2** shows that 91.1% of current smokers noticed health warnings on cigarette packs and 48.5% of them thought about quitting smoking because of those health warnings. More male smokers noticed health warning labels than female smokers (91.5% vs. 73%) or thought about quitting smoking because of health warning labels (49% vs. 31%).

There were no significant differences among age groups or between urban and rural areas with regard to noticing health warnings on cigarette packages or thinking about quitting because of a warning label.

Those with high education levels more commonly reported noticing health warnings on cigarette packages (82%, primary; 91.6%, lower secondary; 96.3%, upper secondary, and 96.8%, college). The difference among the education levels was not significant for the indicator “thinking about quitting smoking.” No significant difference was found among the occupation levels.

**Table 9-3: Percentage of current smokers  $\geq 15$  years who noticed health warnings on cigarette packages and considered quitting because of the warning labels during the last 30 days, by selected demographic characteristics – GATS Viet Nam in 2010 and 2015, and relative changes.**

Demographic characteristics	Current smokers <sup>1</sup> who noticed health warnings on cigarette package <sup>2</sup>		
	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	92.4 (90.7, 93.8)	91.1 (89.2, 92.7)	-1.4
<i>Gender</i>			
Male	93.3 (91.7, 94.6)	91.5 (89.7, 93.1)	-1.8
Female	64.3 (50.4, 76.1)	73.0 (54.8, 85.8)	13.5
<i>Age (years)</i>			
15-24	94.5 (89.5, 97.1)	91.3 (82.9, 95.8)	-3.3
25-44	94.0 (91.8, 95.7)	92.3 (89.5, 94.4)	-1.9
45-64	90.1 (86.9, 92.6)	90.9 (88.4, 92.9)	0.9
65+	83.9 (76.4, 89.3)	81.7 (73.2, 87.9)	-2.6
<i>Residence</i>			
Urban	96.3 (94.6, 97.4)	93.2 (90.7, 95.0)	-3.2
Rural	90.7 (88.4, 92.6)	90.2 (87.5, 92.3)	-0.6
<i>Education level<sup>3</sup></i>			
Primary or less	81.3 (76.0, 85.6)	82.0 (75.9, 86.9)	0.9
Lower secondary	94.3 (92.2, 95.8)	91.6 (89.3, 93.4)	-2.9
Upper secondary	97.7 (94.6, 99.0)	96.3 (92.4, 98.3)	-1.4
College or above	98.2 (95.2, 99.4)	96.8 (93.3, 98.5)	-1.5

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

<sup>2</sup> During the last 30 days.

<sup>3</sup> Education level is reported only among respondents 25+ years old.

Table 9-3 shows the change between GATS 2010 and GATS 2015 with regard to noticing health warnings on cigarette packages. There was no significant increase in the proportion of those who noticed health warnings and no significant changes found among demographic groups.

### 9.3 Noticing cigarette marketing in various public places among adults

#### *Noticing cigarette marketing in various public places*

The key indicator for this section is the percentage of adults aged 15 years or older who noticed any advertisements or signs promoting cigarettes. This indicator is calculated by dividing the number of respondents who said they had noticed any advertisement or signs promoting cigarettes by the total number of respondents.

Table 9-4 presents the distribution of adults aged 15 or older who noticed cigarette marketing in public places or the media (e.g. in stores where cigarettes are sold, on television, radio, billboards, posters, newspapers or magazines, on the Internet, in cinemas, pubs/bars/karaoke shops, in public transportation stations, or on public walls).

The overall percentage of adults who noticed any kind of tobacco advertising, sponsorship, or promotions was 16.6%. Males (19.6%) and those living in urban areas (23.3%) were more likely to have noticed tobacco advertisements, sponsorships, or promotions than were women (13.8%) or those living in rural areas (13.2%).

Overall, the proportion that noticed advertisements in stores was highest (8.6%), followed by restaurants/coffee or tea shops (4%), and on television (1.5%); the proportion was lowest in cinemas (0.1%). The patterns of noticing advertisements by males and females were almost identical, although the proportion of males who noticed advertisements in restaurants/coffee or tea shops was higher than the proportion of females (5.1% vs. 3.0%).

The overall percentage who noticed sport sponsorships was 0.5%. The only significant difference was between urban and rural residents. Those in urban areas were more exposed to sport sponsorships than were those in rural areas (0.9% vs. 0.3%).

The most common cigarette promotions were free gifts or discounts on other products (2.1%) followed by coupons (1.8%).

### ***Noticing cigarette marketing in various public places among current smokers***

The key indicator for this section is the percentage of current smokers aged 15 years or older who noticed any advertisements or signs promoting cigarettes. This indicator was calculated by dividing the number of current smokers aged 15 or older who noticed any advertisements or signs promoting cigarettes by the total number of current smokers aged 15 or older.

**Table 9-5** shows the percentage of current smokers who noticed cigarette advertisements, sport sponsorships, promotions, event sponsorships, or any kind of marketing by gender, age group, and urban or rural residence.

Overall, 19.3% of current smokers noticed some kind of advertisement, sponsorship, or promotion. Current male smokers in the 15-24 age group and those living in urban areas had higher proportions of noticing any kind of advertisement, sponsorship, or promotion than did female smokers (19.4% vs. 14.6%), those over 25 (25% vs. 18.4%), and those living in rural areas (27.9% vs. 15.4%).

Current smokers' pattern of noticing advertisements was similar to that for the overall sample. The highest proportion of current smokers who noticed advertisements did so in stores (9.2%), and the lowest did so in cinemas/theatres (0.1%). More male than female current smokers noticed advertisements in restaurants/bars/cafes/tea shops (4.1% vs. 0.5%), and more current smokers in the urban areas than in rural areas noticed advertisements in restaurants/bars/cafes/tea shops (9.1% vs. 1.7%).

### ***Noticing cigarette marketing in various public places among current non-smokers***

The key indicator for this section is the percentage of non-smokers aged 15 or older who noticed any advertisements or signs promoting cigarettes. This indicator is calculated by dividing the number of non-smokers aged 15 or older who noticed any advertisements or signs promoting cigarettes by the total number of non-smokers aged 15 or older. Overall, the proportion of non-smokers who noticed any advertisement, sponsorship, or promotion was 15.8%.

Table 9.6 shows that the pattern of noticing cigarette advertisements, sponsorships, and promotions for non-smokers was similar to that for the overall sample.

**Table 9-4: Percentage of adults ≥15 years old who noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Viet Nam, 2015.**

Places	Overall		Gender		Age (years)				Residence					
			Male	Female	15-24	25+	Urban	Rural						
<i>Percentage (95% CI)</i>														
<i>Noticed advertisements</i>														
In stores	8.6	(7.7, 9.7)	10.0	(8.6, 11.5)	7.4	(6.4, 8.5)	10.7	(8.8, 13.1)	8.0	(7.1, 9.0)	11.7	(10.3, 13.3)	7.1	(5.9, 8.4)
On television	1.5	(1.2, 1.9)	1.5	(1.1, 2.0)	1.6	(1.2, 2.1)	1.1	(0.6, 2.1)	1.7	(1.3, 2.1)	1.7	(1.2, 2.3)	1.5	(1.1, 2.0)
On the radio	0.2	(0.1, 0.3)	0.3	(0.1, 0.6)	0.1	(0.0, 0.2)	0.1	(0.0, 0.8)	0.2	(0.1, 0.4)	0.1	(0.1, 0.3)	0.2	(0.1, 0.5)
On billboards	0.3	(0.2, 0.5)	0.4	(0.2, 0.7)	0.3	(0.2, 0.5)	0.4	(0.2, 0.9)	0.3	(0.2, 0.5)	0.9	(0.6, 1.3)	0.1	(0.0, 0.2)
On posters	0.6	(0.4, 0.8)	0.7	(0.4, 1.0)	0.5	(0.3, 0.8)	0.5	(0.3, 1.1)	0.6	(0.4, 0.8)	1.1	(0.8, 1.6)	0.3	(0.2, 0.6)
In newspapers or magazines	0.6	(0.4, 0.8)	0.6	(0.3, 0.9)	0.6	(0.4, 0.9)	0.7	(0.3, 1.4)	0.5	(0.4, 0.8)	0.8	(0.5, 1.2)	0.4	(0.3, 0.7)
In cinemas/theatres	0.1	(0.0, 0.2)	0.1	(0.0, 0.2)	0.1	(0.0, 0.2)	0.1	(0.0, 0.3)	0.1	(0.0, 0.2)	0.2	(0.1, 0.4)	0.0	(0.0, 0.1)
On the internet	0.8	(0.6, 1.1)	0.8	(0.5, 1.2)	0.8	(0.6, 1.2)	2.0	(1.4, 3.0)	0.4	(0.3, 0.7)	1.6	(1.2, 2.2)	0.4	(0.2, 0.7)
On public transportation vehicles/stations	0.4	(0.3, 0.6)	0.4	(0.2, 0.6)	0.5	(0.3, 0.8)	0.5	(0.3, 1.0)	0.4	(0.3, 0.6)	0.9	(0.6, 1.3)	0.2	(0.1, 0.4)
On public walls	0.6	(0.4, 0.8)	0.6	(0.3, 0.9)	0.6	(0.4, 0.9)	0.6	(0.3, 1.2)	0.6	(0.4, 0.8)	1.2	(0.8, 1.7)	0.3	(0.1, 0.5)
Restaurants/bars/cafes/tea shops	4.0	(3.5, 4.6)	5.1	(4.2, 6.0)	3.0	(2.5, 3.7)	4.4	(3.3, 5.7)	3.9	(3.3, 4.6)	8.3	(7.1, 9.6)	1.8	(1.3, 2.6)
Somewhere else	0.4	(0.3, 0.6)	0.4	(0.2, 0.6)	0.5	(0.3, 0.8)	0.5	(0.3, 1.0)	0.4	(0.3, 0.6)	0.9	(0.6, 1.3)	0.2	(0.1, 0.4)
<i>Noticed sports sponsorship</i>	0.5	(0.3, 0.7)	0.6	(0.3, 0.9)	0.4	(0.2, 0.7)	0.8	(0.4, 1.7)	0.4	(0.3, 0.6)	0.9	(0.6, 1.3)	0.3	(0.2, 0.6)
<i>Noticed musical, theater, art/fashion event sponsorship</i>	0.3	(0.2, 0.4)	0.2	(0.1, 0.4)	0.4	(0.2, 0.6)	0.1	(0.0, 0.6)	0.4	(0.3, 0.5)	0.5	(0.3, 0.8)	0.2	(0.1, 0.4)
<i>Noticed cigarette promotions</i>														
Free samples	1.0	(0.7, 1.4)	1.7	(1.2, 2.4)	0.3	(0.2, 0.6)	0.8	(0.3, 1.7)	1.1	(0.8, 1.5)	1.3	(1.0, 1.8)	0.8	(0.5, 1.4)
Sale prices	1.0	(0.7, 1.3)	1.5	(1.0, 2.1)	0.5	(0.3, 0.8)	1.5	(0.9, 2.6)	0.8	(0.6, 1.1)	1.0	(0.7, 1.4)	1.0	(0.6, 1.4)
Coupons	1.8	(1.5, 2.2)	2.6	(2.1, 3.4)	1.0	(0.7, 1.4)	1.8	(1.1, 2.8)	1.8	(1.4, 2.2)	2.1	(1.6, 2.7)	1.7	(1.2, 2.2)
Free gifts/discounts on other products	2.1	(1.7, 2.6)	2.8	(2.1, 3.7)	1.4	(1.0, 1.9)	2.7	(1.8, 3.8)	1.9	(1.5, 2.4)	2.9	(2.2, 3.7)	1.7	(1.2, 2.4)
Clothing/item with brand name or logo	1.4	(1.1, 1.8)	1.8	(1.4, 2.5)	1.0	(0.7, 1.4)	1.6	(0.9, 2.7)	1.4	(1.1, 1.7)	2.7	(2.1, 3.5)	0.7	(0.4, 1.2)
<i>Noticed any advertisement, sponsorship, or promotion</i>	16.6	(15.4, 17.9)	19.6	(17.8, 21.6)	13.8	(12.5, 15.2)	19.8	(17.2, 22.6)	15.7	(14.4, 17.0)	23.3	(21.3, 25.3)	13.2	(11.7, 14.9)

**Table 9-5: Percentage of current smokers who noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Viet Nam, 2015.**

Places	Overall	Gender		Age (years)		Residence	
		Male	Female	15-24	25+	Urban	Rural
<i>Percentage (95% CI)</i>							
<i>Noticed advertisements</i>							
In stores	9.2 (7.6, 11.1)	9.2 (7.5, 11.1)	10.3 (3.3, 27.6)	11.4 (6.6, 19.1)	8.9 (7.2, 10.8)	13.4 (10.7, 16.8)	7.3 (5.4, 9.7)
On television	1.6 (1.0, 2.4)	1.6 (1.0, 2.5)	1.4 (0.3, 5.6)	2.0 (0.4, 9.1)	1.5 (1.0, 2.3)	2.2 (1.2, 3.9)	1.3 (0.7, 2.4)
On the radio	0.3 (0.1, 0.8)	0.3 (0.1, 0.8)	0.0 -	0.9 (0.1, 6.0)	0.2 (0.1, 0.6)	0.0 (0.0, 0.3)	0.4 (0.2, 1.2)
On billboards	0.5 (0.2, 1.1)	0.5 (0.2, 1.1)	0.0 -	0.8 (0.1, 5.5)	0.5 (0.2, 1.0)	1.2 (0.5, 2.9)	0.2 (0.1, 0.7)
On posters	0.6 (0.3, 1.1)	0.6 (0.3, 1.1)	0.0 -	0.7 (0.1, 5.0)	0.6 (0.3, 1.0)	1.1 (0.5, 2.1)	0.4 (0.1, 1.1)
In newspapers or magazines	0.5 (0.2, 1.0)	0.5 (0.2, 1.0)	0.0 -	0.8 (0.1, 5.5)	0.4 (0.2, 0.9)	1.0 (0.4, 2.8)	0.2 (0.1, 0.7)
In cinemas/theatres	0.1 (0.0, 0.4)	0.1 (0.0, 0.4)	0.5 (0.1, 3.4)	0.0 -	0.1 (0.0, 0.5)	0.2 (0.0, 1.1)	0.1 (0.0, 0.5)
On the internet	0.3 (0.1, 0.9)	0.4 (0.1, 0.9)	0.0 -	1.8 (0.5, 5.9)	0.1 (0.0, 0.4)	0.6 (0.2, 2.0)	0.2 (0.1, 0.9)
On public transportation vehicles/stations	0.3 (0.1, 0.7)	0.3 (0.1, 0.7)	0.0 -	0.0 -	0.3 (0.1, 0.8)	0.4 (0.1, 1.1)	0.3 (0.1, 0.8)
On public walls	0.5 (0.2, 1.1)	0.5 (0.2, 1.2)	0.0 -	0.0 -	0.6 (0.3, 1.3)	0.9 (0.3, 2.9)	0.3 (0.1, 1.0)
Restaurants/bars/cafes/tea shops	4.0 (3.1, 5.2)	4.1 (3.2, 5.3)	0.5 (0.1, 3.4)	6.5 (3.6, 11.4)	3.7 (2.8, 4.8)	9.1 (6.9, 12.0)	1.7 (1.1, 2.8)
Somewhere else	0.3 (0.1, 0.7)	0.3 (0.1, 0.7)	0.0 -	0.0 -	0.3 (0.1, 0.8)	0.4 (0.1, 1.1)	0.3 (0.1, 0.8)
Noticed sports sponsorship	0.3 (0.1, 0.6)	0.3 (0.1, 0.6)	0.0 -	0.0 -	0.3 (0.2, 0.6)	0.7 (0.3, 1.4)	0.1 (0.0, 0.6)
Noticed musical, theater, art/fashion event sponsorship	0.2 (0.1, 0.6)	0.2 (0.1, 0.6)	0.0 -	0.0 -	0.3 (0.1, 0.6)	0.6 (0.2, 1.4)	0.1 (0.0, 0.7)
<i>Noticed cigarette promotions</i>							
Free samples	1.8 (1.2, 2.8)	1.9 (1.2, 2.9)	0.7 (0.1, 5.0)	3.2 (1.0, 9.6)	1.6 (1.1, 2.5)	2.8 (1.6, 4.8)	1.4 (0.8, 2.6)
Sale prices	1.6 (1.0, 2.6)	1.7 (1.0, 2.7)	0.0 -	0.9 (0.1, 6.5)	1.7 (1.1, 2.8)	1.8 (1.0, 3.1)	1.6 (0.8, 3.0)
Coupons	3.9 (2.9, 5.3)	4.0 (2.9, 5.4)	1.9 (0.6, 6.2)	3.4 (1.3, 8.4)	4.0 (3.0, 5.4)	4.1 (2.6, 6.5)	3.9 (2.6, 5.7)
Free gifts/discounts on other products	3.4 (2.4, 4.7)	3.4 (2.4, 4.8)	0.7 (0.1, 5.0)	4.7 (2.3, 9.6)	3.2 (2.2, 4.6)	5.3 (3.7, 7.5)	2.5 (1.4, 4.4)
Clothing/item with brand name or logo	1.8 (1.3, 2.6)	1.8 (1.2, 2.6)	2.3 (0.3, 15.1)	2.2 (0.8, 6.2)	1.8 (1.2, 2.6)	4.0 (2.6, 6.1)	0.9 (0.4, 1.7)
<i>Noticed any advertisement, sponsorship, or promotion</i>	19.3 (16.9, 21.9)	19.4 (17.0, 22.1)	14.6 (6.1, 30.9)	25.0 (17.2, 34.8)	18.4 (16.1, 21.0)	27.9 (24.0, 32.2)	15.4 (12.6, 18.7)

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

**Table 9-6: Percentage of current smokers who noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Viet Nam, 2015.**

Places	Overall		Gender		Age (years)				Residence					
			Male	Female	15-24		25+		Urban	Rural				
<i>Percentage (95% CI)</i>														
<i>Noticed advertisements</i>														
In stores	8.5	(7.5, 9.6)	10.7	(8.7, 13.0)	7.3	(6.4, 8.5)	10.6	(8.6, 13.1)	7.7	(6.7, 8.8)	11.3	(9.8, 13.0)	7.0	(5.7, 8.5)
On television	1.5	(1.2, 2.0)	1.4	(1.0, 2.2)	1.6	(1.2, 2.1)	1.0	(0.5, 1.9)	1.7	(1.3, 2.2)	1.5	(1.1, 2.2)	1.5	(1.1, 2.1)
On the radio	0.1	(0.1, 0.3)	0.2	(0.1, 0.7)	0.1	(0.0, 0.2)	0.0	-	0.2	(0.1, 0.4)	0.2	(0.1, 0.4)	0.1	(0.0, 0.4)
On billboards	0.3	(0.2, 0.5)	0.3	(0.1, 0.6)	0.3	(0.2, 0.5)	0.3	(0.1, 0.8)	0.3	(0.2, 0.5)	0.8	(0.5, 1.3)	0.0	(0.0, 0.2)
On posters	0.6	(0.4, 0.8)	0.7	(0.4, 1.3)	0.5	(0.3, 0.8)	0.5	(0.2, 1.1)	0.6	(0.4, 0.9)	1.1	(0.8, 1.7)	0.3	(0.1, 0.6)
In newspapers or magazines	0.6	(0.4, 0.9)	0.6	(0.3, 1.2)	0.6	(0.4, 0.9)	0.6	(0.3, 1.4)	0.6	(0.4, 0.9)	0.7	(0.4, 1.2)	0.5	(0.3, 0.9)
In cinemas/theatres	0.1	(0.0, 0.2)	0.0	(0.0, 0.2)	0.1	(0.0, 0.2)	0.1	(0.0, 0.3)	0.1	(0.0, 0.2)	0.2	(0.1, 0.5)	0.0	-
On the internet	0.9	(0.7, 1.3)	1.1	(0.7, 1.8)	0.8	(0.6, 1.2)	2.1	(1.3, 3.1)	0.5	(0.3, 0.9)	1.9	(1.4, 2.6)	0.4	(0.2, 0.9)
On public transportation vehicles/stations	0.5	(0.3, 0.7)	0.4	(0.2, 0.8)	0.5	(0.3, 0.8)	0.6	(0.3, 1.2)	0.5	(0.3, 0.7)	1.0	(0.7, 1.5)	0.2	(0.1, 0.5)
On public walls	0.6	(0.4, 0.8)	0.6	(0.3, 1.0)	0.6	(0.4, 0.9)	0.7	(0.4, 1.4)	0.5	(0.4, 0.8)	1.2	(0.8, 1.8)	0.2	(0.1, 0.5)
Restaurants/bars/cafes/tea shops	4.0	(3.4, 4.7)	5.8	(4.6, 7.3)	3.1	(2.5, 3.7)	4.1	(3.0, 5.5)	4.0	(3.3, 4.8)	8.1	(6.9, 9.4)	1.9	(1.2, 2.8)
Somewhere else	0.5	(0.3, 0.7)	0.4	(0.2, 0.8)	0.5	(0.3, 0.8)	0.6	(0.3, 1.2)	0.5	(0.3, 0.7)	1.0	(0.7, 1.5)	0.2	(0.1, 0.5)
Noticed sports sponsorship	0.5	(0.4, 0.8)	0.8	(0.4, 1.5)	0.4	(0.2, 0.7)	0.9	(0.5, 1.9)	0.4	(0.3, 0.6)	0.9	(0.6, 1.5)	0.4	(0.2, 0.7)
Noticed musical, theater, art/fashion event sponsorship	0.3	(0.2, 0.5)	0.2	(0.1, 0.5)	0.4	(0.2, 0.6)	0.1	(0.0, 0.7)	0.4	(0.3, 0.6)	0.5	(0.3, 0.8)	0.3	(0.1, 0.5)
<i>Noticed cigarette promotions</i>														
Free samples	0.8	(0.5, 1.2)	1.6	(0.9, 2.8)	0.3	(0.2, 0.6)	0.4	(0.1, 1.4)	0.9	(0.5, 1.4)	1.0	(0.7, 1.4)	0.7	(0.3, 1.3)
Sale prices	0.8	(0.5, 1.1)	1.3	(0.8, 2.1)	0.5	(0.3, 0.8)	1.6	(0.9, 2.8)	0.5	(0.3, 0.8)	0.8	(0.5, 1.2)	0.8	(0.4, 1.3)
Coupons	1.2	(0.9, 1.5)	1.5	(1.0, 2.3)	1.0	(0.7, 1.4)	1.6	(0.9, 2.6)	1.0	(0.8, 1.4)	1.5	(1.1, 2.1)	1.0	(0.6, 1.5)
Free gifts/discounts on other products	1.7	(1.3, 2.2)	2.3	(1.6, 3.3)	1.4	(1.0, 2.0)	2.4	(1.5, 3.6)	1.5	(1.1, 2.0)	2.3	(1.6, 3.1)	1.4	(1.0, 2.1)
Clothing/item with brand name or logo	1.3	(1.0, 1.7)	1.8	(1.2, 2.9)	1.0	(0.7, 1.4)	1.5	(0.8, 2.6)	1.2	(0.9, 1.6)	2.4	(1.8, 3.3)	0.7	(0.4, 1.3)
<i>Noticed any advertisement, sponsorship, or promotion</i>	15.8	(14.5, 17.3)	19.8	(17.5, 22.5)	13.7	(12.4, 15.2)	19.0	(16.4, 22.0)	14.7	(13.4, 16.1)	22.0	(20.0, 24.2)	12.5	(10.8, 14.4)

Note: Current non-smokers includes former and never smokers.

## Noticing tobacco advertisements: Comparison between GATS 2010 and GATS 2015

**Table 9-7** presents the percentage of people who noticed cigarette marketing during the previous 30 days according to GATS 2010 and GATS 2015. Overall, no significant change between the two surveys was found. The only significant difference was found for the group aged 15-24 years. In comparison with 2010, percentage of those aged 15-24 years in 2015 who reported noticing advertisement in stores where cigarettes are sold declined 20.7%; those noticing any advertisements, sponsorships, or promotions declined 22%.

**Table 9-7: Percentage of adults ≥15 years old who noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Noticed advertisements in stores where cigarettes are sold			Noticed any advertisement, sponsorship, or promotion		
	2010	2015	Relative change	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	8.6 (7.8, 9.4)	8.6 (7.7, 9.7)	0.8	16.9 (15.8, 18.1)	16.6 (15.4, 17.9)	-1.8
<i>Smoking status</i>						
Current smokers <sup>1</sup>	9.4 (7.9, 11.3)	9.2 (7.6, 11.1)	-2.6	19.1 (17.0, 21.3)	19.3 (16.9, 21.9)	1.1
Non-smokers <sup>2</sup>	8.3 (7.4, 9.2)	8.5 (7.5, 9.6)	2.2	16.2 (15.0, 17.6)	15.8 (14.5, 17.3)	-2.5
<i>Gender</i>						
Male	9.9 (8.8, 11.2)	10.0 (8.6, 11.5)	0.4	19.9 (18.3, 21.5)	19.6 (17.8, 21.6)	-1.2
Female	7.3 (6.3, 8.4)	7.4 (6.4, 8.5)	1.4	14.1 (12.8, 15.6)	13.8 (12.5, 15.2)	-2.6
<i>Age (years)</i>						
15-24	13.5 (11.6, 15.7)	10.7 (8.8, 13.1)	-20.7*	25.3 (22.9, 27.9)	19.8 (17.2, 22.6)	-22.0**
25-44	8.1 (7.1, 9.2)	9.6 (8.3, 11.1)	18.8	16.2 (14.8, 17.8)	18.5 (16.8, 20.4)	14.1
45-64	5.8 (4.7, 7.2)	7.2 (6.1, 8.5)	23.5	11.9 (10.3, 13.7)	13.9 (12.4, 15.6)	16.7
65+	3.7 (2.7, 5.2)	3.2 (2.2, 4.8)	-13.2	8.7 (6.9, 10.9)	7.5 (5.9, 9.6)	-13.7
<i>Residence</i>						
Urban	12.8 (11.4, 14.2)	11.7 (10.3, 13.3)	-8.1	25.1 (23.2, 27.1)	23.3 (21.3, 25.3)	-7.3
Rural	6.7 (5.8, 7.8)	7.1 (5.9, 8.4)	5.2	13.3 (11.9, 14.8)	13.2 (11.7, 14.9)	-0.8
<i>Education level<sup>3</sup></i>						
Primary or less	4.8 (3.7, 6.3)	4.6 (3.4, 6.2)	-4.2	10.6 (8.9, 12.6)	8.4 (6.7, 10.5)	-20.8
Lower secondary	6.9 (5.9, 8.0)	7.8 (6.7, 9.1)	13.2	13.6 (12.2, 15.2)	15.4 (13.8, 17.1)	13.1
Upper secondary	8.4 (6.5, 10.7)	10.5 (8.3, 13.2)	26.0	17.5 (14.6, 20.7)	19.3 (16.5, 22.4)	10.4
College or above	10.5 (8.3, 13.1)	10.6 (8.5, 13.0)	0.6	21.6 (18.8, 24.7)	22.2 (19.4, 25.3)	2.5

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

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

<sup>3</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## 10. Knowledge, Attitudes, and Perceptions

### 10.1 Belief that tobacco smoking causes serious illnesses and specific diseases

The percentage of respondents who believe that smoking tobacco causes serious illness is calculated by dividing the number of respondents who believe that smoking causes serious illness by the total number of respondents. **Table 10-1** presents the percentage of all respondents who were aware of the health effects of tobacco smoking, by socio-demographic group. Almost all adults (95.9%) believed that smoking causes serious diseases and illnesses. The percentage of respondents aware that smoking causes lung cancer (96.6%), stroke (71.5%), and heart attack (69.1%) indicated that 61.2% of adults believed that smoking can cause all three of these diseases.

The proportion of those who believed smoking causes three diseases (stroke, heart attack, and lung cancer) was lowest for the oldest age group (65 or older). Urban adults had a greater perception than rural adults of all the health effects of smoking. Belief that smoking causes three diseases was generally lowest among adults with a primary education or lower (42.9% vs. 64.2–75.6% for those with higher education) and among adults in elementary occupations (56.2% vs. 68%–78.1% for those in high-level occupations).

#### ***Belief that tobacco smoking causes serious illnesses and specific diseases among current smokers***

**Table 10-2** shows the percentages of current smokers who were aware of the health effects of tobacco smoking: specifically serious illness, heart attack, stroke, and lung cancer. The table also shows the percentage believing smoking causes each of three diseases: heart attack, stroke, and lung cancer.

Female smokers were less aware of all the health effects of smoking than male smokers. The largest difference between male and female smokers was awareness of stroke as a health effect of smoking (a difference of 19.6%). The smallest difference was in awareness of heart attack (difference was 7.2%).

Current smokers aged 65 or older were less likely to be aware of all the listed health effects than other age groups.

Current smokers with primary education or lower had less knowledge of all the health effects than smokers in other education groups. Knowledge was low among those in elementary occupations.

#### ***Belief that tobacco smoking causes serious illnesses and specific diseases among current non-smokers***

As shown in **Table 10-3**, the pattern of awareness of the health effects of smoking among non-smokers was similar to the pattern for all respondents.

Almost all non-smokers (96.1%) believed that smoking causes serious diseases and illnesses. The percentage of non-smoker respondents who believed that smoking causes lung cancer (97%), stroke (72.5%), and heart attack (69.3%) showed that 61.9% of current non-smokers believe that that smoking causes heart attack, stroke, and lung cancer.



**Table 10-1: Percentage of adults ≥15 years who believe that smoking causes serious illness, stroke, heart attack, or lung cancer, by selected demographic characteristics – GATS Viet Nam, 2015.**

Adults who believed that smoking causes...										
Demographic characteristics	Serious illness		Stroke		Heart attack		Lung cancer		Stroke, heart attack, and lung cancer	
	<i>Percentage (95% CI)</i>									
<b>Overall</b>	95.9	(95.2, 96.5)	71.5	(69.9, 73.0)	69.1	(67.5, 70.6)	96.6	(96.0, 97.2)	61.2	(59.6, 62.8)
<i>Gender</i>										
Male	96.7	(95.8, 97.3)	70.9	(68.8, 73.0)	69.7	(67.5, 71.8)	96.7	(95.8, 97.4)	61.6	(59.3, 63.8)
Female	95.2	(94.1, 96.1)	72.0	(70.1, 73.9)	68.6	(66.7, 70.4)	96.6	(95.9, 97.2)	60.8	(58.8, 62.8)
<i>Age (years)</i>										
15-24	96.5	(94.5, 97.7)	70.4	(66.8, 73.8)	64.4	(60.9, 67.8)	98.0	(96.9, 98.8)	57.4	(53.8, 60.9)
25-44	96.4	(95.5, 97.2)	73.1	(71.0, 75.1)	71.8	(69.6, 73.9)	97.4	(96.5, 98.1)	63.4	(61.2, 65.6)
45-64	96.3	(95.2, 97.1)	73.0	(71.0, 75.0)	70.7	(68.7, 72.7)	96.3	(95.3, 97.1)	63.6	(61.4, 65.7)
65+	91.4	(89.2, 93.2)	62.5	(58.8, 66.1)	64.1	(60.7, 67.3)	90.4	(88.0, 92.4)	54.2	(50.6, 57.7)
<i>Residence</i>										
Urban	96.7	(95.9, 97.3)	76.1	(74.4, 77.8)	73.9	(72.0, 75.6)	97.9	(97.3, 98.3)	66.3	(64.4, 68.3)
Rural	95.5	(94.5, 96.4)	69.1	(66.9, 71.2)	66.7	(64.5, 68.8)	96.0	(95.0, 96.8)	58.6	(56.3, 60.8)
<i>Education level<sup>1</sup></i>										
Primary or less	88.9	(86.1, 91.1)	53.9	(50.2, 57.5)	52.1	(48.5, 55.7)	88.8	(86.0, 91.1)	42.9	(39.5, 46.4)
Lower secondary	97.1	(96.3, 97.7)	73.5	(71.6, 75.3)	72.5	(70.5, 74.3)	97.6	(96.9, 98.1)	64.2	(62.2, 66.2)
Upper secondary	98.1	(96.9, 98.9)	78.1	(74.7, 81.2)	75.9	(72.3, 79.1)	98.6	(96.6, 99.4)	68.7	(65.0, 72.2)
College or above	98.4	(97.5, 99.0)	83.8	(81.2, 86.1)	83.1	(80.5, 85.4)	99.3	(98.6, 99.7)	75.6	(72.6, 78.3)
<i>Occupation</i>										
Senior officials	94.5	(84.3, 98.2)	81.3	(70.3, 88.8)	76.9	(65.8, 85.3)	96.1	(87.5, 98.9)	71.0	(59.2, 80.5)
Professionals	98.5	(96.3, 99.4)	87.4	(82.9, 90.8)	85.4	(79.4, 89.8)	99.5	(97.3, 99.9)	78.1	(71.9, 83.2)
Associate professionals	99.1	(97.7, 99.7)	83.6	(78.0, 88.0)	83.4	(77.1, 88.2)	99.5	(97.9, 99.9)	76.0	(69.5, 81.5)
Elementary occupations	95.6	(94.5, 96.5)	66.0	(63.4, 68.5)	64.7	(62.2, 67.1)	96.0	(94.8, 96.9)	56.2	(53.6, 58.7)
Other occupations	96.6	(95.2, 97.6)	77.9	(75.3, 80.3)	74.9	(72.0, 77.6)	97.8	(96.8, 98.5)	68.0	(64.9, 70.9)

<sup>1</sup> Education level is reported only among respondents 25+ years old.

**Table 10-2: Percentage of current smokers ≥15 years old who believe that smoking causes serious illness, stroke, heart attack, or lung cancer, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Current smokers who believed that smoking causes...									
	Serious illness		Stroke		Heart attack		Lung cancer		Stroke, heart attack, and lung cancer	
	<i>Percentage (95% CI)</i>									
<b>Current smokers<sup>1</sup></b>	95.4	(93.9, 96.5)	67.9	(65.1, 70.5)	68.3	(65.3, 71.1)	95.3	(93.7, 96.4)	58.8	(55.8, 61.7)
<i>Gender</i>										
Male	95.8	(94.5, 96.8)	68.3	(65.5, 71.0)	68.5	(65.5, 71.3)	95.7	(94.3, 96.7)	59.1	(56.1, 62.1)
Female	78.6	(60.0, 90.0)	49.7	(36.0, 63.5)	61.3	(45.6, 75.0)	78.7	(60.2, 90.0)	46.0	(32.6, 60.1)
<i>Age (years)</i>										
15-24	94.7	(88.9, 97.5)	66.7	(56.8, 75.4)	60.6	(50.1, 70.2)	97.9	(94.3, 99.2)	54.6	(44.7, 64.1)
25-44	96.1	(94.1, 97.4)	69.8	(66.0, 73.5)	71.4	(67.5, 75.0)	96.5	(94.5, 97.7)	61.3	(57.4, 65.0)
45-64	95.7	(93.6, 97.1)	67.2	(63.3, 70.8)	67.4	(63.3, 71.3)	94.0	(91.7, 95.7)	58.5	(54.3, 62.6)
65+	89.7	(82.7, 94.1)	57.6	(48.7, 66.0)	63.5	(54.8, 71.4)	86.0	(78.4, 91.2)	49.2	(40.9, 57.7)
<i>Residence</i>										
Urban	95.4	(93.4, 96.8)	72.8	(69.2, 76.2)	72.8	(69.2, 76.2)	96.6	(94.8, 97.8)	64.6	(60.7, 68.2)
Rural	95.4	(93.4, 96.8)	65.7	(62.0, 69.1)	66.3	(62.3, 70.1)	94.6	(92.5, 96.2)	56.2	(52.3, 60.1)
<i>Education Level<sup>2</sup></i>										
Primary or less	87.4	(81.5, 91.6)	50.3	(43.7, 56.8)	49.5	(42.8, 56.3)	85.3	(78.8, 90.0)	39.7	(33.5, 46.2)
Lower secondary	97.2	(95.8, 98.1)	69.8	(66.1, 73.2)	71.2	(67.8, 74.4)	96.6	(95.2, 97.6)	60.9	(57.1, 64.6)
Upper secondary	97.6	(93.4, 99.1)	73.7	(66.5, 79.8)	74.3	(66.7, 80.7)	97.6	(93.5, 99.2)	65.9	(58.3, 72.8)
College or above	98.6	(95.8, 99.5)	82.2	(75.1, 87.7)	88.5	(82.6, 92.5)	99.4	(98.0, 99.8)	77.2	(69.6, 83.4)
<i>Occupation</i>										
Senior officials	93.6	(66.2, 99.1)	86.0	(66.4, 95.0)	88.7	(68.6, 96.5)	100.0	-	84.1	(64.9, 93.8)
Professionals	98.9	(92.7, 99.8)	78.5	(62.6, 88.8)	89.4	(74.7, 96.0)	100.0	-	71.8	(54.7, 84.2)
Associate professionals	97.7	(90.6, 99.5)	88.2	(74.7, 95.0)	86.1	(73.4, 93.3)	97.3	(88.7, 99.4)	82.3	(67.9, 91.1)
Elementary occupations	94.4	(92.1, 96.1)	61.3	(57.2, 65.2)	64.1	(59.8, 68.2)	94.6	(92.2, 96.2)	53.1	(48.9, 57.2)
Other occupations	96.8	(94.9, 98.0)	76.8	(72.5, 80.7)	72.5	(67.8, 76.8)	96.9	(94.9, 98.1)	65.1	(60.2, 69.7)

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

<sup>2</sup> Education level is reported only among respondents 25+ years old.

**Table 10-3: Percentage of non-smokers ≥15 years old who believe that smoking causes serious illness, stroke, heart attack, or lung cancer, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Non-smokers who believed that smoking causes...									
	Serious illness		Stroke		Heart attack		Lung cancer		Stroke, heart attack and lung cancer	
	Percentage (95% CI)									
<b>Non-smokers<sup>1</sup></b>	96.1	(95.3, 96.8)	72.5	(70.8, 74.2)	69.3	(67.6, 71.0)	97.0	(96.4, 97.6)	61.9	(60.1, 63.7)
<i>Gender</i>										
Male	97.4	(96.2, 98.2)	73.1	(70.2, 75.8)	70.6	(67.6, 73.5)	97.5	(96.3, 98.3)	63.7	(60.6, 66.7)
Female	95.4	(94.4, 96.3)	72.2	(70.3, 74.1)	68.7	(66.8, 70.5)	96.8	(96.1, 97.3)	61.0	(59.0, 62.9)
<i>Age (years)</i>										
15-24	96.7	(94.5, 98.0)	70.9	(67.0, 74.6)	64.9	(61.1, 68.6)	98.1	(96.8, 98.8)	57.8	(53.9, 61.6)
25-44	96.6	(95.4, 97.4)	74.3	(71.9, 76.5)	71.9	(69.5, 74.2)	97.7	(96.8, 98.4)	64.2	(61.7, 66.7)
45-64	96.5	(95.3, 97.4)	75.2	(72.9, 77.3)	72.0	(69.6, 74.2)	97.2	(96.2, 97.9)	65.4	(63.0, 67.8)
65+	91.7	(89.4, 93.5)	63.3	(59.4, 67.1)	64.1	(60.4, 67.7)	91.2	(88.7, 93.1)	55.0	(51.2, 58.8)
<i>Residence</i>										
Urban	97.0	(96.3, 97.6)	77.0	(75.0, 78.9)	74.1	(72.1, 76.0)	98.2	(97.7, 98.6)	66.8	(64.6, 68.9)
Rural	95.6	(94.4, 96.5)	70.2	(67.7, 72.5)	66.8	(64.3, 69.1)	96.4	(95.4, 97.2)	59.3	(56.8, 61.8)
<i>Education level<sup>2</sup></i>										
Primary or less	89.3	(86.6, 91.6)	55.1	(51.0, 59.1)	53.0	(49.1, 56.8)	89.9	(87.5, 91.9)	44.0	(40.2, 47.8)
Lower secondary	97.0	(96.1, 97.8)	74.9	(72.8, 76.9)	72.9	(70.7, 75.0)	98.0	(97.2, 98.6)	65.5	(63.2, 67.8)
Upper secondary	98.4	(97.1, 99.1)	79.7	(75.9, 83.1)	76.5	(72.4, 80.1)	98.9	(96.0, 99.7)	69.7	(65.5, 73.6)
College or above	98.4	(97.3, 99.0)	84.1	(81.2, 86.6)	81.8	(78.9, 84.4)	99.3	(98.4, 99.7)	75.2	(71.9, 78.3)
<i>Occupation</i>										
Senior officials	94.8	(81.5, 98.7)	79.6	(66.1, 88.7)	72.8	(59.0, 83.3)	94.8	(83.6, 98.5)	66.4	(52.2, 78.1)
Professionals	98.4	(95.7, 99.4)	89.0	(84.4, 92.4)	84.7	(78.0, 89.6)	99.4	(96.8, 99.9)	79.2	(72.5, 84.6)
Associate professionals	99.4	(98.0, 99.8)	82.6	(76.2, 87.6)	82.8	(75.6, 88.2)	100.0	-	74.7	(67.2, 81.0)
Elementary occupations	96.0	(94.8, 96.9)	67.9	(64.8, 70.7)	64.9	(62.0, 67.7)	96.6	(95.4, 97.4)	57.4	(54.4, 60.3)
Other occupations	96.4	(94.6, 97.7)	78.4	(75.1, 81.3)	75.9	(72.4, 79.1)	98.2	(97.0, 98.9)	69.1	(65.4, 72.6)

<sup>1</sup> Includes former and never smokers.

<sup>2</sup> Education level is reported only among respondents 25+ years old.

**Table 10-4** presents the percentage of adults aged 15 or older who believed that smoking causes serious illness, stroke, heart attack, or lung cancer, by smoking status and selected demographic characteristics in 2010 and 2015 and the change between the two surveys. The table shows that, in general, overall knowledge significantly increased, with a rise of 10.2%. Relative changes were largest for current smokers (19.8%), followed by those in age group 25-44 (14.1%), those with lower secondary education (12%), those in urban areas (11.8%), and males (11.5%). Change was not significant for people with a primary education (-0.5%), those in age group 15-24 years, those in age group 65 or older, or those with an upper secondary education.

**Table 10-4: Percentage of adults ≥15 years old who believe that smoking causes serious illness, stroke, heart attack, or lung cancer, by smoking status and selected demographic characteristics –Viet Nam 2010 and 2015 and relative changes.**

Demographic characteristics	Adults who believe that smoking causes <sup>1</sup> stroke, heart attack, and lung cancer		
	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	55.5 (53.8, 57.2)	61.2 (59.6, 62.8)	10.2***
<i>Smoking status</i>			
Current smokers <sup>2</sup>	49.1 (46.2, 52.0)	58.8 (55.8, 61.7)	19.8***
Non-smokers <sup>3</sup>	57.5 (55.7, 59.3)	61.9 (60.1, 63.7)	7.6**
<i>Gender</i>			
Male	55.3 (53.0, 57.5)	61.6 (59.3, 63.8)	11.5***
Female	55.8 (53.8, 57.7)	60.8 (58.8, 62.8)	9.1***
<i>Age (years)</i>			
15-24	55.5 (52.2, 58.8)	57.4 (53.8, 60.9)	3.4
25-44	55.6 (53.3, 57.8)	63.4 (61.2, 65.6)	14.1***
45-64	57.7 (55.1, 60.2)	63.6 (61.4, 65.7)	10.2**
65+	49.7 (46.0, 53.4)	54.2 (50.6, 57.7)	8.9
<i>Residence</i>			
Urban	59.3 (57.5, 61.2)	66.3 (64.4, 68.3)	11.8***
Rural	53.8 (51.5, 56.1)	58.6 (56.3, 60.8)	8.8**
<i>Education level<sup>4</sup></i>			
Primary or less	43.1 (39.9, 46.4)	42.9 (39.5, 46.4)	-0.5
Lower secondary	57.4 (55.2, 59.4)	64.2 (62.2, 66.2)	12.0***
Upper secondary	64.5 (60.7, 68.2)	68.7 (65.0, 72.2)	6.5
College or above	68.8 (65.6, 71.8)	75.6 (72.6, 78.3)	9.9**

<sup>1</sup> Among those who believe or don't know if smoking causes serious illness.

<sup>2</sup> Includes daily and occasional (less than daily) smokers.

<sup>3</sup> Includes former and never smokers.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## 10.2 Beliefs about secondhand smoke (SHS) causing serious illness among non-smokers

The percentage of adults who believed that breathing other people's tobacco smoke caused serious illness among non-smokers was calculated by dividing the number of respondents who believed that breathing other people's smoke caused serious illness among non-smokers by the total number of respondents. **Table 10-5** shows that overall 90.3% of adults believed that breathing other people's smoke causes serious illness among non-smokers. More non-smokers than smokers believed SHS causes health risks (91.3% vs. 87.0%). The lower respondents' age, the better their knowledge about SHS. Respondents and current smokers from urban areas had better knowledge about SHS than those from rural areas. Both smokers and non-smokers with high education levels had better knowledge about SHS than those with low education levels.

**Table 10-5: Percentage of adults ≥ 15 years old who believe that breathing other people's smoke causes serious illness in non-smokers, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Belief that breathing other people's smoke causes serious illness in non-smokers		
	Overall	Current smokers <sup>1</sup>	Non-smokers <sup>2</sup>
	<i>Percentage (95% CI)</i>		
<b>Overall</b>	90.3 (89.3, 91.3)	87.0 (84.9, 88.8)	91.3 (90.2, 92.2)
<i>Gender</i>			
Male	90.5 (89.1, 91.7)	87.5 (85.5, 89.3)	93.0 (91.4, 94.3)
Female	90.1 (88.8, 91.3)	66.2 (49.9, 79.5)	90.4 (89.1, 91.5)
<i>Age (years)</i>			
15-24	94.0 (91.5, 95.7)	90.8 (84.3, 94.8)	94.4 (91.7, 96.3)
25-44	92.3 (91.0, 93.4)	89.5 (86.8, 91.7)	93.3 (92.0, 94.4)
45-64	88.5 (87.0, 89.9)	84.4 (81.1, 87.1)	90.0 (88.4, 91.5)
65+	77.2 (74.0, 80.1)	71.0 (62.3, 78.3)	78.3 (75.0, 81.4)
<i>Residence</i>			
Urban	93.1 (92.1, 94.1)	88.3 (85.4, 90.6)	94.4 (93.4, 95.2)
Rural	88.9 (87.4, 90.2)	86.4 (83.6, 88.7)	89.6 (88.1, 91.0)
<i>Education level<sup>3</sup></i>			
Primary or less	75.2 (72.3, 77.9)	72.1 (65.9, 77.5)	76.2 (73.2, 79.0)
Lower secondary	90.8 (89.5, 91.9)	88.0 (85.1, 90.4)	91.8 (90.5, 93.0)
Upper secondary	95.2 (93.4, 96.5)	92.6 (87.8, 95.5)	96.2 (94.2, 97.5)
College or above	96.6 (95.1, 97.7)	94.7 (88.5, 97.7)	97.1 (95.5, 98.1)
<i>Occupation</i>			
Senior officials	97.1 (88.9, 99.3)	88.6 (64.4, 97.1)	100.0 -
Professionals	98.4 (96.0, 99.4)	98.9 (92.7, 99.8)	98.3 (95.3, 99.4)
Associate professionals	98.2 (96.3, 99.1)	94.9 (86.3, 98.2)	98.9 (96.9, 99.6)
Elementary occupations	88.6 (87.0, 90.1)	86.1 (83.2, 88.5)	89.6 (87.9, 91.2)
Other occupations	91.9 (90.2, 93.4)	88.4 (84.7, 91.3)	93.4 (91.5, 94.9)

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

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

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 10-6** presents the percentage of adults aged 15 or older who believe that breathing other people's smoke causes serious illness among non-smokers, by smoking status and selected demographic characteristics. The table shows that, in general, adults' knowledge increased 3.8%. The increase was largest for those with primary or lower education (10.9%). Changes were not significant for people with a lower secondary or higher level of education.

**Table 10-6: Percentage of adults ≥ 15 years old who believe that breathing other people's smoke causes serious illness in non-smokers, by smoking status and selected demographic characteristics – GATS Viet Nam, 2010 and 2015.**

Demographic characteristics	Adults who believe that breathing other people's smoke causes serious illness in non-smokers		
	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	87.0 (85.7, 88.1)	90.3 (89.3, 91.3)	3.8***
<i>Smoking status</i>			
Current smokers <sup>1</sup>	82.2 (79.8, 84.3)	87.0 (84.9, 88.8)	5.8**
Non-smokers <sup>2</sup>	88.5 (87.2, 89.6)	91.3 (90.2, 92.2)	3.2***
<i>Gender</i>			
Male	87.0 (85.5, 88.4)	90.5 (89.1, 91.7)	4.0***
Female	86.9 (85.4, 88.2)	90.1 (88.8, 91.3)	3.7***
<i>Age (years)</i>			
15-24	92.5 (90.6, 94.1)	94.0 (91.5, 95.7)	1.5
25-44	88.2 (86.5, 89.6)	92.3 (91.0, 93.4)	4.7***
45-64	84.4 (82.5, 86.2)	88.5 (87.0, 89.9)	4.9***
65+	71.7 (68.2, 75.0)	77.2 (74.0, 80.1)	7.7*
<i>Residence</i>			
Urban	91.4 (90.3, 92.4)	93.1 (92.1, 94.1)	1.9*
Rural	85.0 (83.3, 86.5)	88.9 (87.4, 90.2)	4.6***
<i>Education level<sup>3</sup></i>			
Primary or less	67.8 (64.8, 70.7)	75.2 (72.3, 77.9)	10.9***
Lower secondary	89.3 (87.9, 90.6)	90.8 (89.5, 91.9)	1.6
Upper secondary	94.6 (92.8, 96.0)	95.2 (93.4, 96.5)	0.6
College or above	96.5 (95.0, 97.6)	96.6 (95.1, 97.7)	0.1

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

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

<sup>3</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### 10.3. Beliefs about the relative harm of different types of cigarettes

**Table 10-7** presents the percentage of adults ≥15 years old who have certain beliefs about cigarettes, by smoking status and selected demographic characteristics. Overall, 24.5% of adults believed that certain types of cigarettes can be less harmful than others. Current smokers were more likely to have that belief than non-smokers (28.4% vs. 23.3%).

Among current smokers, this belief was more commonly found among males than among females (28.8% vs. 13.3%), but no significant difference between other demographic groups was found.

**Table 10-7: Percentage of adults ≥15 years old who have certain beliefs about cigarettes, by smoking status, and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Adults who believe that certain types of cigarettes can be less harmful than others					
	Overall		Current smokers <sup>1</sup>		Non-smokers <sup>2</sup>	
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	24.5	(23.2, 25.9)	28.4	(26.0, 31.0)	23.3	(21.9, 24.8)
<i>Gender</i>						
Male	27.9	(26.1, 29.8)	28.8	(26.3, 31.4)	27.2	(24.8, 29.8)
Female	21.2	(19.6, 22.9)	13.3	(6.4, 25.6)	21.3	(19.7, 23.0)
<i>Age (years)</i>						
15-24	24.2	(21.2, 27.4)	28.4	(20.2, 38.3)	23.6	(20.5, 26.9)
25-44	25.1	(23.3, 27.1)	28.1	(24.5, 32.1)	24.0	(22.0, 26.1)
45-64	25.5	(23.6, 27.4)	29.5	(26.2, 33.1)	24.0	(21.9, 26.2)
65+	19.6	(16.7, 22.8)	25.6	(18.7, 34.0)	18.5	(15.5, 22.0)
<i>Residence</i>						
Urban	23.8	(22.1, 25.6)	29.7	(25.8, 33.8)	22.3	(20.5, 24.1)
Rural	24.8	(23.0, 26.7)	27.9	(24.8, 31.2)	23.9	(21.9, 26.0)
<i>Education level<sup>3</sup></i>						
Primary or less	19.8	(17.4, 22.3)	25.9	(21.0, 31.4)	17.8	(15.3, 20.5)
Lower secondary	26.1	(24.2, 28.0)	28.0	(24.7, 31.6)	25.3	(23.2, 27.6)
Upper secondary	25.1	(21.8, 28.7)	30.3	(23.1, 38.7)	23.1	(19.6, 27.1)
College or above	25.9	(22.9, 29.1)	32.4	(25.2, 40.6)	24.4	(21.3, 27.9)
<i>Occupation</i>						
Senior officials	26.3	(17.6, 37.3)	24.7	(11.8, 44.4)	26.9	(16.7, 40.3)
Professionals	29.1	(23.0, 36.0)	34.8	(21.1, 51.6)	28.0	(21.4, 35.6)
Associate professionals	22.6	(17.3, 29.0)	30.6	(18.2, 46.5)	20.9	(15.3, 28.0)
Elementary occupations	25.0	(23.1, 27.1)	28.0	(24.7, 31.5)	23.8	(21.6, 26.2)
Other occupations	25.3	(22.9, 27.9)	29.4	(24.6, 34.6)	23.7	(20.8, 26.8)

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

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

<sup>3</sup> Education level is reported only among respondents 25+ years old.

Table 10-8 presents changes between 2010 and 2015 in the percentage of adults ≥15 years old who have certain beliefs about cigarettes, by smoking status and selected demographic characteristics. In general, higher percentages of adults aged 15 or older believed that certain types of cigarettes can be less harmful than others in 2015 than in 2010, with a relative change of 15.5%. The largest change was observed among those with lower secondary education (29.5%), among those aged 25-44 years old (27.3%), among females (21.3%), among non-smokers (21%)

**Table 10-8: Changes in percentage of adults ≥15 years old who have certain beliefs about cigarettes, by smoking status, and selected demographic characteristics – GATS Viet Nam in 2010 and in 2015.**

Demographic characteristics	Adults who believe certain types of cigarettes can be less harmful than others <sup>1</sup>		
	2010	2015	Relative change
	<i>Percentage (95% CI)</i>		<i>Percentage</i>
<b>Overall</b>	21.2 (20.1, 22.4)	24.5 (23.2, 25.9)	15.5***
<i>Smoking Status</i>			
Current smokers <sup>2</sup>	27.5 (25.0, 30.1)	28.4 (26.0, 31.0)	3.5
Non-smokers <sup>3</sup>	19.3 (18.0, 20.6)	23.3 (21.9, 24.8)	21.0***
<i>Gender</i>			
Male	25.1 (23.5, 26.9)	27.9 (26.1, 29.8)	11.2*
Female	17.5 (16.1, 19.0)	21.2 (19.6, 22.9)	21.3**
<i>Age (years)</i>			
15-24	21.5 (19.1, 24.1)	24.2 (21.2, 27.4)	12.6
25-44	19.7 (18.3, 21.3)	25.1 (23.3, 27.1)	27.3***
45-64	24.0 (22.0, 26.0)	25.5 (23.6, 27.4)	6.3
65+	19.8 (17.1, 22.9)	19.6 (16.7, 22.8)	-1.3
<i>Residence</i>			
Urban	22.5 (21.0, 24.2)	23.8 (22.1, 25.6)	5.5
Rural	20.6 (19.1, 22.1)	24.8 (23.0, 26.7)	20.7**
<i>Education level<sup>4</sup></i>			
Primary or less	21.9 (19.5, 24.5)	19.8 (17.4, 22.3)	-9.7
Lower secondary	20.1 (18.7, 21.7)	26.1 (24.2, 28.0)	29.5***
Upper secondary	20.3 (17.4, 23.5)	25.1 (21.8, 28.7)	23.8
College or above	27.1 (24.1, 30.3)	25.9 (22.9, 29.1)	-4.5

<sup>1</sup> Among those who believe or don't know if smoking causes serious illness.

<sup>2</sup> Includes daily and occasional (less than daily) smokers.

<sup>3</sup> Includes former and never smokers.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001



#### **10.4. Awareness of penalties for violating smoke-free rules and related actions**

**Table 10-9 presents the percentage of adults ≥15 years old who were aware of penalties for violating smoke-free rules and related actions by smokers and non-smokers.**

Among adults aged 15 or older, 82.6% were aware of penalties for violating smoke-free rules overall. Males had significantly better awareness than females (85% vs. 80.3%). Those in the oldest group had significantly less awareness than people in other age groups. Adults who lived in urban areas had significantly better awareness than those in rural areas (86.4% vs. 80.6%). Those with low education levels had less awareness than those with high education levels (59.9% vs. 85%–92.9%). Those in an elementary occupation had lower awareness than groups in higher-level occupations (79.9% vs. 87.5%–95.6%).

The prevalence of violating smoke-free rules by current smokers during 30 days prior to the interviews was 4.1%. Violations were more common among male than female smokers and among those with a college education than among those with a lower education level (10.1% vs. 2.7%–3.5%).

Among those who smoked where smoking was not allowed, only 6.2% were reminded by authorities and only 0.8% were punished by authorities; 20.9% were reminded by other people.

During the 30 days prior to the interview, 13.8% of non-smokers saw smokers violating smoke-free rules, and 25.7% of those non-smokers reminded smokers to stop smoking.

**Table 10-9: Percentage of adults ≥15 years old who were aware of penalties for violating smoke-free rules and related actions among smokers and non-smokers in the past 30 days, by selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Awareness about the penalties for violating smoke-free rules <sup>1</sup>		In the past 30 days, current smokers who...						In the past 30 days, non-smokers who...					
			Smoked in places not allowed		Were punished by authorities <sup>2</sup>		Were reminded by authorities <sup>2</sup>		Were reminded by people <sup>2</sup>		Saw smokers violating smoke-free rules		Reminded smokers to stop <sup>3</sup>	
<i>Percentage (95% CI)</i>														
<b>Overall</b>	82.6	(81.2, 83.9)	4.1	(3.1, 5.3)	0.8	(0.1, 5.6)	6.2	(2.9, 12.8)	20.9	(12.9, 32.1)	13.8	(12.7, 15.0)	25.7	(22.1, 29.6)
<i>Gender</i>														
Male	85.0	(83.3, 86.6)	4.2	(3.2, 5.4)	0.8	(0.1, 5.6)	6.2	(2.9, 12.8)	20.9	(12.9, 32.1)	19.4	(17.1, 21.8)	23.7	(18.5, 29.9)
Female	80.3	(78.4, 82.0)	0.0		~	~	~	~	~	~	10.9	(9.8, 12.2)	27.4	(22.7, 32.7)
<i>Age (years)</i>														
15-24	84.7	(81.6, 87.3)	4.2	(1.9, 9.1)	~	~	~	~	~	~	19.2	(16.4, 22.4)	20.7	(14.7, 28.4)
25-44	85.1	(83.3, 86.7)	4.6	(3.2, 6.6)	0.0	-	7.5	(2.6, 19.7)	21.4	(10.6, 38.7)	13.6	(12.1, 15.2)	25.0	(19.6, 31.2)
45-64	82.4	(80.4, 84.2)	3.9	(2.6, 5.8)	0.0	-	3.8	(1.1, 11.6)	17.5	(7.8, 34.8)	11.3	(9.9, 12.8)	34.3	(28.0, 41.3)
65+	66.1	(62.5, 69.5)	0.1	(0.0, 0.5)	~	~	~	~	~	~	7.1	(5.4, 9.1)	32.0	(21.8, 44.2)
<i>Residence</i>														
Urban	86.4	(84.7, 87.9)	4.0	(2.7, 5.9)	2.7	(0.4, 17.1)	9.7	(3.1, 26.1)	37.2	(21.0, 56.9)	17.6	(16.1, 19.3)	24.2	(20.2, 28.6)
Rural	80.6	(78.7, 82.4)	4.1	(2.9, 5.7)	0.0	-	4.7	(1.6, 12.8)	13.9	(6.3, 28.0)	11.8	(10.4, 13.4)	26.8	(21.4, 33.0)
<i>Education level<sup>4</sup></i>														
Primary or less	59.9	(56.4, 63.3)	2.9	(1.4, 5.9)	~	~	~	~	~	~	3.9	(2.8, 5.6)	18.0	(8.7, 33.5)
Lower secondary	85.0	(83.4, 86.4)	3.5	(2.5, 5.0)	1.7	(0.2, 11.5)	5.3	(1.8, 15.0)	18.7	(8.9, 35.1)	12.9	(11.4, 14.5)	27.2	(21.6, 33.7)
Upper secondary	88.6	(86.0, 90.7)	2.7	(1.4, 5.2)	~	~	~	~	~	~	17.9	(15.4, 20.7)	15.1	(10.2, 21.6)
College or above	92.9	(91.0, 94.4)	10.1	(5.9, 16.9)	~	~	~	~	~	~	22.4	(19.6, 25.5)	33.2	(26.6, 40.7)
<i>Occupation</i>														
Senior officials	95.6	(87.8, 98.5)	8.8	(2.0, 31.6)	~	~	~	~	~	~	37.1	(24.9, 51.2)	41.9	(21.3, 65.7)
Professionals	94.0	(90.1, 96.5)	11.1	(4.5, 24.8)	~	~	~	~	~	~	30.3	(24.3, 37.0)	20.6	(12.9, 31.2)
Associate professionals	93.1	(88.3, 96.0)	12.6	(5.0, 28.4)	~	~	~	~	~	~	24.0	(18.3, 30.7)	50.2	(36.1, 64.3)
Elementary occupations	79.9	(77.7, 81.9)	2.3	(1.5, 3.6)	0.0	-	7.1	(2.3, 20.0)	16.9	(7.5, 33.7)	10.6	(9.1, 12.2)	26.4	(19.7, 34.4)
Other occupations	87.5	(85.4, 89.4)	6.5	(4.3, 9.8)	0.0	-	3.7	(0.8, 16.5)	10.7	(3.6, 27.8)	12.2	(10.2, 14.5)	26.5	(18.5, 36.4)

<sup>1</sup> Among all adults.

<sup>2</sup> Among those who smoked in places where smoking was not allowed.

<sup>3</sup> Among those who saw any smokers violating smoke-free regulations.

<sup>4</sup> Education level is reported only among respondents 25+ years old.

~ Indicates estimate based on less than 25 unweighted cases and has been suppressed.

## 10.5. Support for increasing taxes on tobacco products

**Table 10-10: Percentage of adults ≥15 years old who support increasing taxes on tobacco products, by smoking status and selected demographic characteristics – GATS Viet Nam, 2015.**

Demographic characteristics	Adults who support increasing taxes on tobacco products					
	Overall		Current smokers <sup>1</sup>		Non-smokers <sup>2</sup>	
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	65.4	(63.5, 67.2)	50.9	(47.4, 54.3)	69.6	(67.7, 71.4)
<i>Gender</i>						
Male	64.0	(61.6, 66.3)	51.2	(47.7, 54.6)	74.7	(72.0, 77.2)
Female	66.7	(64.5, 68.7)	39.2	(25.3, 55.2)	67.0	(64.8, 69.0)
<i>Age (years)</i>						
15-24	64.3	(60.6, 67.9)	31.1	(22.9, 40.6)	69.1	(65.3, 72.7)
25-44	66.8	(64.4, 69.1)	52.7	(48.2, 57.2)	71.9	(69.5, 74.2)
45-64	64.7	(62.3, 67.1)	55.7	(51.4, 59.9)	68.1	(65.5, 70.6)
65+	63.5	(59.6, 67.2)	53.2	(44.4, 61.7)	65.3	(61.2, 69.2)
<i>Residence</i>						
Urban	69.3	(67.2, 71.4)	54.4	(50.2, 58.5)	73.2	(71.0, 75.3)
Rural	63.4	(60.8, 65.9)	49.3	(44.7, 53.9)	67.7	(65.1, 70.2)
<i>Education level<sup>3</sup></i>						
Primary or less	45.8	(42.2, 49.5)	28.8	(23.1, 35.2)	51.4	(47.5, 55.3)
Lower secondary	64.6	(62.3, 66.9)	56.5	(52.1, 60.8)	67.8	(65.3, 70.1)
Upper secondary	76.6	(72.9, 79.9)	65.8	(57.8, 73.0)	80.5	(76.6, 84.0)
College or above	83.6	(80.8, 86.1)	68.0	(59.8, 75.3)	87.1	(84.3, 89.5)
<i>Occupation</i>						
Senior officials	77.3	(67.0, 85.1)	74.3	(51.7, 88.6)	78.3	(66.2, 86.9)
Professionals	86.8	(81.1, 91.0)	67.7	(50.3, 81.3)	90.4	(84.5, 94.1)
Associate professionals	83.1	(78.0, 87.2)	62.7	(47.5, 75.7)	87.4	(82.0, 91.3)
Elementary occupations	60.9	(58.2, 63.6)	46.7	(41.9, 51.6)	66.6	(63.9, 69.2)
Other occupations	67.0	(64.2, 69.7)	55.1	(49.6, 60.6)	71.9	(68.8, 74.8)

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

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

<sup>3</sup> Education level is reported only among respondents 25+ years old.

**Table 10-10** presents the percentage of respondents ≥15 years old who support increasing taxes on tobacco products, by smoking status and selected demographic characteristics. Overall 65.4% supported increasing taxes on tobacco products. Current smokers were less supportive than non-smokers (50.9% vs. 69.6%).

Among current smokers, the youngest age group was significantly less supportive than those in older age groups (31.1% vs. 52.7%–55.7%). Smokers who lived in rural areas were less supportive than those in urban areas, and smokers with a primary education were less supportive than those with a higher-level education.

# Discussion

## Tobacco use

GATS 2015 found that the overall prevalence of current smokers in Viet Nam was 22.5%, with a stark gender divide: prevalence was high among men (45.3%) and low among women (1.1%).

The estimated number of current adult smokers in Viet Nam in 2015 was about 15.6 million. In comparison with GATS in 2010 (47.4%), prevalence of tobacco smoking had a relative reduction of 5.3%, but this change was not statistically significant. Smoking prevalence among men in urban areas decreased considerably from 47.2% in 2010 to 42.2% in 2015 ( $p < 0.05$ ). In particular, smoking among men in urban areas dropped significantly from 42.5% in 2010 to 38.7% in 2015. The significant reduction in prevalence of urban tobacco smoking observed over the five years can be explained by the fact that accessibility to communications about tobacco and counseling programs for tobacco cessation is better in urban areas than in rural areas.

Overall, the average number of cigarettes smoked per day in 2015 did not decline significantly from 2010. GATS 2015 found a significantly lower proportion of smokers who smoked fewer than 10 cigarettes per day (relative change, 22.4%) and a significantly higher proportion who smoked more than 20 cigarettes per day (relative change, 28.6%). During the period, several tobacco control measures were implemented in Viet Nam following Decision 1315 by the Prime Minister in 2009 ratifying the plan for implementing the FCTC and the Law on Prevention and Control of Tobacco Harms of Viet Nam, enacted in May 2013. The fact there was no significant change in smoking prevalence between the two surveys could be explained by the fact that the tobacco control law had been in effect for only two years, so the impact could not yet be seen. It may also be that the tobacco control measures (e.g., tobacco tax, enforcement of a smoke-free environment, communication and cessation programs) are simply not strong enough to reduce tobacco use.

Similar to the pattern of tobacco use found by GATS 2010, GATS 2015 found that manufactured cigarettes dominated other types of smoked tobacco (17.9%). The bamboo water pipe was the second most prevalent (6.7%). The prevalence of shisha use was only 0.1%. Electronic cigarettes were introduced in Viet Nam very recently. However, 2% of men reported ever using electronic cigarettes, with 0.4% currently using them. Information on the use of shisha and electronic cigarettes could serve as benchmark data for monitoring their future use.

GATS 2015 confirms that those with low education levels, those from the rural areas, and those in elementary and lower professional occupations are more likely to use tobacco and smoke tobacco. Therefore, those groups need to be prioritized by intervention programs. Those in rural areas had a higher prevalence of using smokeless tobacco than urban dwellers, most commonly betel chewing. Smokeless tobacco use was more common among women (2%) than among men (0.8%). Therefore, any intervention program in rural areas should also pay attention to this type of tobacco use.

## Secondhand Smoke

According to the tobacco control law of Viet Nam and supporting documents, tobacco smoking in indoor public places is comprehensively banned. A comparison with GATS 2010 findings shows that by 2015, the prevalence of secondhand smoke in Viet Nam had significantly decreased. The largest reduction was found on public transportation (a 43.6% relative drop). For universities, the relative decline was 30.3%. The smallest reduction was found for bars/cafés/tea shops and restaurants. This remarkable improvement shows the initial success of the tobacco control program during the past few years. The reduction in the level of SHS exposure was the results of various communication campaigns and some modest enforcement efforts by authorized officials.

Although improvement can be clearly seen, the prevalence of secondhand smoke reported by adults aged 15 or older in Viet Nam remained high: 42.6% in workplaces (which affects 8.8 million people who work indoors), 59.9% in homes (which affects 41.2 million people), 89.1% in bars/cafes/tea shops, and 80.7% in restaurants. Even in government offices, prevalence was 30.9% and in universities it was 37.9%. These findings mean that more effort is needed to enforce the tobacco control law to further reduce exposure to secondhand smoke in Viet Nam. Especially, Implementation of smoke-free cafes/bars/tea shops and restaurants should be strengthened.

## **Cessation**

The proportion of current smokers planning to quit tobacco smoking “within the next month” was only 5.2% and “within the next 12 months” was only 12.6%. Thus, the proportion of smokers interested in quitting in 2015 was below that of GATS 2010, when the proportion of current smokers who planned to quit tobacco smoking “within the next month” was 9.5%, and “within the next 12 months” was 19.8% [2]. GATS 2015 also found that among current smokers and former smokers, 39.6% had made an attempt to quit in the previous 12 months (39.8% of males and 32.8% of females), a 28.3% relative decline from 2010. The significant reduction in the proportion of smokers interested in quitting as well as the proportion of quit attempts shows a gap in tobacco control activities during the five years from 2010 to 2015, a gap that needs to be closed. This reduction in quit attempts might be explained by communication messages or communication methods that, over time, lost their effectiveness at promoting attempts to quit smoking.

GATS 2015 indicates that the quit rate for ever daily smokers was 24.6%, while 29% of ever smokers had quit. Education proved to be important for behavior change, since quitting smoking was more common among former daily smokers with college degrees than that among those with low education levels (35.1% vs 20.7%). In comparison with the quit rate of GATS 2010, the quit rate among former daily smokers increased significantly only among those in urban areas (up by 24.2%). This finding can be explained by the fact that the urban population has more awareness about the harmful effects of tobacco smoke, making them more likely to quit. It may also indicate that cessation programs in urban areas were more active and effective than those in rural areas. This hypothesis is supported by the fact that the availability of cessation services in Viet Nam is mostly in the central and national hospitals, which are more accessible to the urban population.

Among the smokers who visited an HCP during the previous 12 months, 45.6% were asked about their tobacco smoking. More than one third (40.5%) of all smokers and recent quitters who visited healthcare providers had received advice to quit smoking by an HCP during the previous 12 months. GATS 2015 found that 30.7% more smokers were asked about smoking when they visited healthcare facilities than in 2010. Smokers who visited healthcare facilities and were advised to stop smoking increased by 36.3%. These results indicate the success of tobacco control efforts conducted at healthcare facilities. During the past few years, several training and communication programs have been set up for healthcare staff to engage them more in tobacco control by providing their patients with advice related to tobacco smoking.

Most smokers who made a quit attempt did not use any assistance. Nicotine replacement therapy was used by only 3.0%, and counseling and advice was used by only 2.3%. Non-use of assistance in attempting to quit reduces the likelihood of success. Having HCPs provide counseling and advice on quitting should be promoted, as this increases the likelihood of success.

## **Cigarette expenditures and support for raising tax**

In 2015, the mean amount that a current manufactured-cigarette smoker spent in a month was VND 181,300 (around US\$ 8). In 2010, that expenditure was VND 146,300 at the adjusted constant rate for VND in 2015. The difference between the two surveys’ findings, however, was not statistically significant. Tobacco tax was low and did not increase from 2010 to 2015. Excise tax for tobacco in Viet Nam in 2015 accounted for only 65% of factory price, equal to about 41.6% of the retail price. This is lower than the level of excise tax recommended by WHO, which is 70% of retail price [10]. GATS 2015 indicates that, overall, 65.4% of respondents supported higher taxes on tobacco products. Therefore, besides other measures to reduce tobacco demand in Viet Nam, excise tax should be raised urgently.

## **Media**

In 2015, 75.3% of all adults noticed anti-smoking information broadcast through the media or displayed in public places. Television was mentioned as the media they noticed it on by the largest number of respondents (65.3%), meaning it remains the most wide-reaching means of connecting with the public. Another important medium is the Internet: according to Internet Live Stats, the proportion of Vietnamese people with Internet access at home increased sharply from 0.3% in 2000 to 50.8% in 2015 [11]. Given this steep trend, the Internet and social media

may soon become one of the best means of communication. Therefore, tobacco control communicators should increase the number of tobacco control messages disseminated via the Internet and social media.

### **Knowledge, Attitudes, and Perceptions**

GATS 2015 continues to show generally good knowledge about the harmful effects of tobacco use in Viet Nam. However, although 95.9% of adults believe that smoking causes serious diseases and illnesses and 96.6% of adults are aware that smoking causes lung cancer, only 61.2% of adults believe that smoking causes all three of these diseases (lung cancer, stroke and heart attack). This finding implies that communications are not balanced in the messages about various health problems.

As with knowledge of the harmfulness of tobacco use, awareness of penalties for violating smoke-free rules was high (82.6%). This finding could be the effect of good communication with the public about the Law on Prevention and Control of Tobacco Harms and related regulations.

It is important to note that only 6.2% of smokers who violated smoke-free rules were reminded by authorities and only 0.8% of them were punished by authorities; only 20.9% were reminded by other people. Thus, enforcement of smoke-free environments in Viet Nam should be strengthened and more effective measures to increase the level of compliance with the smoke-free law should be introduced.

# Conclusion

GATS Viet Nam 2015 provides national estimates of tobacco use and data around the six strategies for tobacco control recommended by WHO (MPOWER). GATS 2015 allowed comparisons with findings from GATS 2010. The Law on Prevention and Control of Tobacco Harms in Viet Nam has been in effect since 2013. Together with the implementation of several supporting legal documents and guidelines, it has led to significant positive changes in tobacco control. Specifically, GATS 2015 found:

1. The prevalence of indoor exposure to secondhand smoke in most places declined significantly from 2010 to 2015, including in homes (from 73.1% to 59.9%), in workplaces (from 55.9% to 42.6%), in schools (from 22.3% to 16.1%), and on public transportation (from 34.4% to 19.4%).
2. The prevalence of tobacco smoking among men in urban areas decreased from 47.7% to 42.7%, especially cigarette smoking, which decreased from 42.5% to 38.0%
3. The proportion of smokers who visited healthcare providers during the previous 12 months and were asked about their smoking status increased significantly from 34.9% to 45.6%; in addition the proportion of smokers who were advised by a healthcare provider to quit also increased significantly from 29.7% to 40.5%.
4. There was a clear improvement in the public's awareness of the danger of smoking and exposure to secondhand smoke.
5. The proportion of smokers who noticed health warnings on cigarette packages remained high (91.1% in 2015).

## Some limitations and challenges for tobacco control in Viet Nam:

1. The overall prevalence of tobacco smoking decreased slightly from 23.8% in 2010 to 22.5% in 2015.
2. Prevalence of SHS in all public places declined significantly but is still at a high level.
3. Noticing cigarette advertising and promotions declined significantly among those aged 15 to 24, the group most commonly targeted by the tobacco industry (from 25.3% in 2010 to 19.8% in 2015). However, the overall prevalence of adults noticing cigarette advertising and promotions did not decrease.
4. The cost of 100 manufactured cigarettes as a percentage of GDP per capita decreased (to 2.5% in 2015 from 2.7% in 2010).
5. The proportion of former smokers among ever smokers remained unchanged (29.3% to 29.0%). However, the percentage of smokers who made quit attempts fell markedly, from 55.3% to 39.6%.

## Recommendations

Several important indicators of tobacco control improved from 2010 to 2015, especially reductions in exposure to SHS in public places and prevalence of tobacco smoking among men in urban areas. But the overall decrease in tobacco smoking prevalence was not significant, which indicates that more efforts are needed to reduce harms caused by tobacco use, especially in rural areas. Concrete action plan should be developed to strengthen implementation of the WHO MPOWER package and national tobacco control law:

- 7. Monitor tobacco use, tobacco products and implementation of prevention policies:** Continuous monitoring of tobacco use and related indicators is important for producing evidence for effective and timely interventions at various levels.
- 8. Protect people from tobacco smoke:** Implementation of smoke-free policies improved, which resulted in a significant reduction in exposure to SHS. However, exposure is still high in homes, workplaces, public places, and especially in restaurants (at 80.7%). Smoke-free laws and their enforcement should be strengthened, with special focus on the hospitality sector. Exposure to SHS can be reduced by strictly implementing 100% smoke-free policies for indoor public areas.
- 9. Raise taxes on tobacco:** The tobacco tax in Viet Nam is estimated at about 41.6% of retail price, among the lowest in the world. Therefore, policy-makers need to raise excise tax on tobacco products to the level that will reduce the affordability of tobacco products. Increasing taxes on tobacco products is an evidence-based strategy proven to reduce consumption and increase national tax revenue.
- 10. Enforce bans on tobacco advertising, promotion, and sponsorship (TAPS):** To protect young people from exposure to TAPS, regular monitoring of TAPS should be conducted. The enforcement of the TAPS ban should be strengthened.
- 11. Warn about the dangers of tobacco:**
  - a. Communication activities should be strengthened to sustain and increase the public's awareness of the dangers of tobacco use, especially in rural areas. Modern communication means (i.e. digital communications) should be used so that the tobacco control messages can reach to a higher proportion of the population.
  - b. Graphic health warnings have been implemented on cigarette packs for more than two years, so a new set of pictorial health warnings with hard-hitting pictures should be applied as soon as possible to increase the impact. Larger size for the warning pictures on the cigarette packs should also be considered.
- 12. Offer help to quit tobacco use:** The rate of smokers making quit attempts is still low. To encourage and support smokers to quit, a national cessation program should be established and existing programs should be strengthened. Especially important are services such as hotlines and community-based cessation consultation services.



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