

# GATS| INDONESIA



## GLOBAL ADULT TOBACCO SURVEY: INDONESIA REPORT 2011



**World Health  
Organization**  
Regional Office for South-East Asia



CDC FOUNDATION



# **Global Adult Tobacco Survey: Indonesia Report 2011**

World Health Organization, Regional Office for South East Asia.

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## Foreword



Implementation of MPOWER policy package has been approved by the Regional Committee. MPOWER recommends periodic monitoring on tobacco control indicators. Monitoring tobacco control through a standard mechanism is the milestone for understanding the trends in tobacco use, and thus providing better opportunity for strengthening tobacco control policy and programmes in countries.

The recognition of the need for a standardized survey to monitor adult tobacco use led WHO and its partners, in particular Centers for Disease Control and Prevention, Atlanta, USA , and Centers for Disease Control and Prevention Foundation, USA, to launch the Global Adult Tobacco Survey (GATS) , 2011 in Indonesia under the Bloomberg Initiative. The survey is designed to produce nationally representative estimates on tobacco control indicators that are comparable over time and across nations using a standard protocol.

The report would serve as an authoritative reference source for policy-makers, health professionals and all other stakeholders of tobacco control in Indonesia. Findings of this report give renewed emphasis to the need for far-reaching policy response to the challenges posed by deaths and disability due to tobacco use in the country.

I would like to congratulate the Ministry of Health, the implementing agencies and all those involved for having completed the survey successfully, which I am sure has contributed substantially to capacity building of the country to conduct large and standardized surveys. Most importantly, the findings mentioned in this report will be useful in designing and strengthening effective tobacco control interventions in Indonesia.

A handwritten signature in black ink, reading "Samlee Plianbangchang".

Dr Samlee Plianbangchang  
Regional Director



MINISTER OF HEALTH  
REPUBLIC OF INDONESIA

## FOREWORD



Tobacco consumption in Indonesia has increased significantly in the last two decades due to several factors, such as the growth of the population, the relatively cheap price of cigarettes, and aggressive marketing of tobacco industries. Community Based Surveys such as National Socioeconomic Survey, Baseline Health Research and Global Adult Tobacco Survey show significant increase of active male cigarette smokers in Indonesia, that is from 53.9 % in 1995 to 67.0 % in 2011.

This alarming situation prompted us to improve public policy, to plan a comprehensive tobacco control program and to propose more strict laws and regulations. Several efforts have been implemented in Indonesia in the last 15 years, including: periodic increase of tobacco tax, expansion of smoke free areas and working places, public transport facilities; requirement to put the health warning on cigarette packaging and restriction on broadcasting time of electronic advertisement.

The Global Adult Tobacco Survey complements efforts of the National Institute of Health Research and Development Minister of Health in monitoring the tobacco problem periodically and provides comprehensive evidence and information for tobacco control planning, appropriate intervention and evaluation as well as to establish the national tobacco surveillance system. The results should also lead to identification of more appropriate interventions, improve implementation of existing programs and establish improved laws and regulations on tobacco control.

The survey has been a collaborative activity of national institutions, namely: Statistics Indonesia/BPS and National Institute of Health Research & Development, MoH; international organizations that include: CDC Foundation and U.S. Centers for Disease Control and Prevention, Bloomberg Philanthropies, Tobacco Free Initiative WHO HQ, WHO SEARO and WHO Indonesia; to all of whom I'd like to express my gratitude and high appreciation.

Hopefully, these nationally representative findings will significantly contribute to our efforts in prevention of health hazards due to tobacco use in Indonesia.

**Nafsiah Mboi, M.D. (Ped.), M.P.H.**  
Minister of Health of the Republic of Indonesia



**BPS-Statistics Indonesia**

## **Foreword**



The Indonesian Law Act number 16, year 1997 about Statistics the BPS-Statistics Indonesia (BPS) shall collect, process, analyze, and disseminate information relating to basic to basic Statistics. However, the required information assembled by the World Health Organization (WHO) for tobacco use in Indonesia was collected by BPS whit collaborating whit the National Institute for Health Research and Development of Ministry of Health (NIHRD-MOH) Indonesia, and the centers for Disease Control and Prevention (CDC) Atlanta USA through the 2011 Indonesia Global Adult Tobacco Surey (IGATS)

The results of the 2011 IGATS have been analyzed and published in this report. BPS is grateful to all who have involved to conduct the survey and to prepare this publication, especially staffs of BPS, NIHRD-MOH, CDC, abd WHO'S experts who have introduced the data collection system by using hand held devices in the survey.

Hopefully, this publication will be be used strongly for health policies and other purposes.

Jakarta, Agustus 2012

BPS-Statistics Indonesia

A handwritten signature in black ink, likely belonging to DR. Suryamin.

**DR. Suryamin**  
Chief Statistic

## Preface

Evidence based policy development on tobacco control at national and local levels is needed at various administrative levels. Indonesia is currently one of the countries with the highest level of smoking prevalence. This condition will lead to increase incidence of non-communicable diseases and will threaten the community health and economic security of lower and middle income countries like Indonesia as well as causes negative impact to health systems, households and individuals.

The challenge is Indonesia will face higher levels of Non Communicable Diseases at earlier stages of economic development compared with developed countries and having less time to respond effectively.

This report presents results of the 2011 Indonesian Global Adult Tobacco Survey Thailand and provides opportunities for national and international tobacco control partners to use in improving the tobacco control strategies and activities.

The Report is presented in ten Chapters as follows:

Chapter 1: Introduction—provides an overview of Burden of Tobacco in Indonesia, Current Tobacco Control Policies and Survey Objectives

Chapter 2: Methodology—describes the survey methods and provides information on the study population, sampling design, questionnaires, data collection and statistical analysis.

Chapter 3: Sample and Population Characteristics—describes the Indonesian population aged 15 years and above.

The following six chapters address key survey findings by topic area found in the survey that include: Chapter 4: Tobacco Use; Chapter 5: Cessation; Chapter 6: Secondhand Smoke; Chapter 7: Economics; Chapter 8: Media and Chapter 9: Knowledge, Attitudes and Perceptions. Chapter 10: Conclusion; summarizes the conclusion of the 2011 Indonesian GATS.

Hopefully this effort will contribute to the sustainable tobacco control programs in Indonesia and in designing more effective interventions.

Soewarto Kosen  
EDITOR



## Acknowledgements

The 2011–2012 Global Adult Tobacco Survey (GATS) in Indonesia was successfully completed due to the efforts and involvement of numerous organizations and individuals at different stages of the survey. We would like to thank everyone who helped to make the survey a success.

First of all, we are grateful to the Ministry of Health in Indonesia for its leadership, vision and support. We would like to express our thanks to the Ministry of Health, Indonesia, for nominating the Badan Pusat Statistik (BPS)/Statistics Indonesia and the National Institute of Health Research and Development (NIHRD) as the implementing agencies for GATS in Indonesia, and for providing guidance and support throughout the process.

At the BPS/Statistics Indonesia, we gratefully acknowledge Dr. Happy Hardjo, former Director for Population & Labour Statistics, for effective supervision and coordination of the project tasks related to GATS implementation that were carried out, Mr. Kadarmanto, for providing technical oversight and inputs during the sample design, selection and implementation of the survey and for expertise during sample weighting and country report writing; Mr. Guntjang Amanulla, for ongoing management of these tasks, especially for his dedicated work in preparing the country-specific version of the GATS questionnaire, data collection, implementation and quality assurance during the fieldwork. We would also like to thank Mr. Dwino Daries, Ms. Nila Nurmala, and Mr. Indra Cahyono, for IT administration, support and management throughout implementation of the survey.

At the NIHRD, we express our gratitude to Dr. Soewarta Kosen, Senior Researcher and Ms. Ingan Tarigan, for their leadership in coordinating all the tasks related to GATS pretest implementation, data analysis and report writing.

We would like to express our thanks to the World Health Organization (WHO), the US Centers for Disease Control and Prevention (CDC) and the CDC Foundation for their technical support and collaboration. We acknowledge the help and cooperation from the members of the GATS Questionnaire Review Committee, Sample Review Committee (SRC) and Analysis Review Committee for their technical reviews to ensure that the country report is internationally acceptable and comparable to other countries implementing GATS.

We are grateful for the support we received from WHO Headquarters and Regional and Country Offices, especially from Dr. Dharendra N. Sinha, Regional Advisor, Surveillance (Tobacco control), WHO SEARO, and Dr. Widyastuti Wibisana WR Indonesia Office, who were responsible for coordinating this survey. Their efforts and support enabled the smooth collaboration of all implementing agencies at all crucial stages of study realization. We would like to acknowledge the contributions of Mr Sameer Pujari from WHO Geneva, who provided technical support and coordination, especially questionnaire programming, staff training and data aggregation.

We sincerely acknowledge the collaborative exchange and technical support from CDC. We acknowledge the outstanding partnership and support extended to all by Dr Samira Asma, Chief of the Global Tobacco Control Branch. We are also pleased to express our special thanks to Dr Krishna Mohan



Palipudi, CDC focal point for Indonesia, for his continuous technical guidance and valuable support throughout all stages of the survey. Thanks are also due to Dr Linda Andes and Ms Glenda Blutcher-Nelson for their technical and statistical support during analysis and reporting of data. We also appreciate the coordination and support provided by Ms Sophia Song throughout the project. Thanks are due to Mr Edward Rainey and Mr Brian Taitt for their editorial and graphic support for the analytical tables, factsheets and reports.

I am also sincerely grateful to the Bloomberg Philanthropies for their collaboration and financial assistance in successfully conducting GATS in Indonesia. Many thanks are due to CDC Foundation, which provided the most modern electronic equipment for carrying out data collection. Special mention is due to Mr William Parra for his coordination and involvement in the project and Mr Brandon Talley for his guidance with respect to administrative and budget issues.

This acknowledgement would not be complete without expressing appreciation for the hard work put in by the interviewers, supervisors and IT personnel involved in collecting data for GATS in Indonesia. We also gratefully acknowledge the administrative, accounts and other staff of the BPS and NIHRD for their continuous cooperation during the entire project period.

And last but not least, credit goes to all of the men and women who took the time to respond to the lengthy questionnaire with tremendous patience and without any expectation from GATS.

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## Executive Summary

The Global Adult Tobacco Survey (GATS), 2011 in Indonesia is a nationally representative household survey of all non-institutionalized men and women aged 15 years and above. It is designed to produce internationally comparable data on tobacco use and tobacco control measures using a standardized questionnaire, sample design, data collection and management procedures.

The survey used a four-stage stratified cluster sampling and was designed to produce key indicators for the country as a whole, and was also stratified by men and women as well as urban and rural areas. In the first stage, 50 urban primary sampling units (PSUs) and 50 rural PSUs were selected, from which a total of 8994 households were selected, of which 8581 completed interviews. One individual was then randomly chosen from among the eligible persons in each of these households using a handheld electronic data collection device. Of them, 8305 completed individual interviews with an overall response rate of 94.3%. Data collected from these individuals provided information on tobacco use, cessation, second-hand smoke, economics, media, and knowledge, attitudes and perceptions.

The GATS was conducted by BPS-Statistics Indonesia, in collaboration with the National Institute of Health Research and Development (NIHRD), Ministry of Health (MOH). Technical assistance was provided by WHO and the United States Centers for Disease Control and Prevention (CDC). Financial support for the survey was provided by the Bloomberg Philanthropies.

**Tobacco use:** In Indonesia, 67.4% of men and 4.5% of women comprising 36.1% of the population (61.4 million) currently use tobacco in smoked or smokeless form. Tobacco use is more prevalent in rural areas (39.1%) as compared to urban areas (33.0%). In Indonesia, smoking is the main form of tobacco use and 34.8% (59.9 million) of the adult population currently smoke tobacco. The prevalence of smoking is 67.0% (57.6 million) among men and 2.7% (2.3 million) among women. Among the adult population, 56.7% of adult men (57.6 million), 1.8% of adult women (1.6 million) and 29.2% overall (50.3 million) are daily smokers. Currently, smoking is more prevalent in rural areas (37.7%) as compared to urban areas (31.9%).

Among those who are currently tobacco users, the majority (34.6%) consume cigarettes of any kind (kretek, white cigarette or hand-rolled), while only 0.3% consume other smoked tobacco products such as pipe, cigar, *shisha*, etc. Among the types of cigarettes, kretek is the most popular (31.5%), followed by hand-rolled (4.7%) and white cigarette (2.2%). Kretek smoking is more common among men (60.9%) as compared to women (2.3%) and more in rural areas (34.5%) as compared to urban areas (28.6%).

Kretek smoking increased by age; from 25.2% in age group 15–24 years to 34.6% and 35.2% in age group 25–44 and 45–64 years respectively, however it showed a decline in much older group (65 years and above, 21.5%). The prevalence of hand-rolled cigarette smoking increases with age, and is highest among those aged 65+ years (13.2%) while white cigarette smoking did not show the increasing pattern by age. The prevalence of kretek smoking among college and university-educated people was lowest (25.6%) compared with those who had completed primary school (33.9%).

The overall average numbers of cigarettes smoked per day is 12 sticks (13 sticks for men and eight sticks for women). The average age at initiation of daily smoking is 17 years; this is the same for urban and rural areas. Overall, 29.2% are daily smokers and 5.6% are occasional smokers. The prevalence of daily smoking is highest in the 45–64 years age group (33.5%) and among those who are self-employed (43.4%). Daily smoking is higher in rural than in urban areas (26.3% and 32.2%, respectively), while occasional smoking is the same in both areas. Occasional smoking is highest among those in the 15–24 years age group, and those who were unemployed (7%) and self-employed (6.9%).

The average age overall at initiation of daily smoking is 17.6 years. There is no difference in age at initiation of smoking among urban and rural areas (17.7 and 17.5 years, respectively), and those who are college or university educated had a slightly higher age at initiation (19.5 years).

**Cessation:** Nearly 50% of current smokers plan or are thinking about quitting; however, only 10% plan to quit within 12 months. More than a quarter of smokers (30.4%) made an attempt to quit in the past 12 months. Among those who visited a health-care facility, 40.5% were asked about their history of tobacco smoking and 34.6% were advised to quit smoking. Of those who attempted to quit during the past 12 months, 7.0% had counseling and 70.7% quit without assistance.

**Second-hand smoke:** Among all adults, 51.3% (14.6 million) were exposed to tobacco smoke at the workplace. Men (58.0%) were exposed more often than women (41.4%). At home, 78.4% of adults (133.3 million) were exposed to tobacco smoke. Among people who visited restaurants, 85.4% were exposed to tobacco smoke, while among those who used public transportation, 70% were exposed.

**Economics:** Among kretek cigarette smokers, 79.8% bought their last cigarette in a kiosk. Average cigarette expenditure per month among kretek cigarette smokers was IDR 369 948. The average price per 20 sticks paid by kretek cigarette smokers was IDR 12 719. The price paid was higher in urban areas (IDR 14 095) as compared to only IDR 11 615 in rural areas. *Gudang garam* was the most popular brand purchased by current kretek cigarette smokers (21.8%). The second most popular brand was *Djarum* (18.8%). *Sampoerna*, *Dji Sam Soe*, and *Tali Jagad* with 15.4%, 6% and 5.3%, respectively were the third, fourth and fifth most popular brands.

**Media:** Nearly one quarter of the adult population (23.1%) noticed anti-white cigarette smoking information, mostly on television or radio. The number was much higher for anti-kretek cigarette smoking on the same media (40.3%). Cigarette marketing in stores where cigarettes are sold was noticed by nearly half of the adult population (47.6%). Nearly four in five people (82.5%) noticed any cigarette advertisement and promotion (other than in stores or sporting events sponsorships). Among current smokers, 72.2% noticed health warnings on cigarette packages; 27.1% of them thought about quitting smoking because of those warnings.

**Knowledge, attitude and perceptions:** Overall, four in five people (86.0%) believe that smoking causes serious illness such as heart attack (81.5%) and lung cancer (84.7%). However, fewer people know that smoking causes other specific illnesses – premature birth (49.5%), stroke (45.5%) and chronic obstructive pulmonary disease (36%). Overall, 23.9% of adults believe that smokeless tobacco use causes serious illness, whereas 73.7% believe that exposure to second-hand smoke causes serious illness in non-smokers.

**Policy implications:** GATS provides critical information on key indicators of tobacco control by sociodemographic characteristics and creates an opportunity for policy-makers and the tobacco control community at different levels to make or modify targeted interventions in different areas of tobacco control. Overall, findings from GATS indicate that there is a positive environment for tobacco control. Based on the findings and the MPOWER framework, the specific recommendations are:

- Tobacco control awareness programs be designed to cover all types of tobacco products and in such a way that all subpopulations have equal access to the interventions and information.
- Periodic monitoring of tobacco use be continued to implement the MPOWER policy package.
- Build capacity among health-care providers and create cessation facilities in health care settings as well as in local communities.
- Implement 100% smoke-free policies that cover all public places and workplaces to fully protect nonsmokers from exposure to secondhand smoke.
- Utilize effective anti-smoking media messages and pictorial health warnings on all tobacco products.
- Implement advertising restrictions with effective enforcement which are shown to have a significant impact on reducing tobacco use.
- Raise the price of tobacco products to make it unaffordable to buy tobacco products for the people at large.

# 1. Introduction

Indonesia is a huge archipelagic country extending 5120 km from east to west and 1760 km from north to south. It encompasses 13 667 islands, only 6000 of which are inhabited. Indonesia's total land area is 1 919 317 sq. km. Included in Indonesia's total territory is another 93 000 sq. km of inland seas (straits, bays and other water bodies). The population of Indonesia was 237.6 million in 2010. The growth rate is high, at 1.9%. Fifty-eight per cent of the population lives on the island of Java, the world's most populous island.

In August 2006, the World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC) convened an expert consultation to discuss adult tobacco surveillance and make recommendations for the development of a standard survey protocol. The expert consultation also recognized the challenges of limited funding and methodological complexities when conducting systematic adult tobacco surveys, and identified a lack of comparability in ongoing national surveys.

The Bloomberg Initiative to Reduce Tobacco Use offers resources to fill the data gap for measuring adult tobacco use globally and to optimize the reach and results of the ongoing Global Tobacco Surveillance System (GTSS), which comprises three school-based surveys for youth and selected adult populations – the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey (GSPS) and the Global Health Professions Students Survey (GHPSS), and a household-based survey, the Global Adult Tobacco Survey (GATS). Results from the GATS will assist countries in the formulation, tracking and implementation of effective tobacco control interventions, and enable them to compare results of their survey with results from other countries where GATS has been conducted.

In the first phase, GATS was completed in 14 countries of the world between 2008 and 2010, covering over 50% of the world's population. By the completion of second phase, the survey will cover 58% of the world's population, including Indonesia.

## 1.1. Burden of tobacco use in Indonesia

Indonesia is the fifth-largest producer of tobacco leaf. It is among the five topmost producers and exporters of cigarettes. Indonesia is the fourth-largest cigarette consuming country. It ranks third in the number of men smokers and 17th for women smokers. In 2008, cigarette consumption in Indonesia was 225 000 000 billion sticks. The country is the third-largest cigarette consumer in the world.

The National Baseline Health Research in 2010 showed that the average consumption of cigarettes per person (aged 15 years or above) was 12 sticks/day, ranging from nine sticks in Bali to 19 sticks in Aceh. It was also found that those who had a higher education level were less likely to use tobacco. The prevalence of smoking among university graduates was 20.6% compared to 26.3% among those without schooling. The prevalence of smoking among those aged 15 years or above in different years was obtained from the National Socioeconomic Survey (SUSENAS) and basic health surveys (one of the subset samples of SUSENAS). The questionnaire was mainly based on tobacco smoking. Questions on chewing tobacco products were not included. In the questions on smoking, changes were made between surveys, with some questions being deleted and some added. SUSENAS includes samples of people in the age group of 10+ years.

The percentages of smokers aged 15 years and above by sex in Indonesia from 1995 to 2010 were as follows:

Year	Men	Women	Total
1995	53.9	1.7	27.2
2001	62.9	1.4	31.8
2004	63.0	5.0	35.0
2007	65.3	5.6	35.4
2010	65.9	4.2	34.7

SUSENAS also collects information on exposure to second-hand smoke in homes. In 2010, about 35% of people were exposed to second-hand smoke at home. The questionnaire on exposure to second-hand smoke was changed between 1995 and 2001.

Several retrospective studies in Indonesia showed a relationship between smoking behaviour and the risk of developing cardiovascular diseases (including stroke), respiratory diseases and cancer. The Baseline Health Research 2007 revealed that stroke is the leading cause of death (15.4% of total deaths), followed by neoplasm (5.7%) and coronary heart disease (5.1%). The prevalence of smoking among Indonesians aged 15 years and above is 34.7% (28.2% daily smokers and 6.5% occasional smokers). About 30.8% of the rural population and 25.9% of the urban population smoke every day. The average number of sticks consumed per person per day is 12. The age at initiation of smoking and percentages for each age group are: 5–9 years (1.7%); 10–14 years (17.5%); 15–19 years (43.3%); and 20–24 years (14.6%). The prevalence of smoking at home is 76.1%, of whom the largest proportion is in the Central Sulawesi Province (90.3%) and Jambi Province (90.0%). About 35.0% of smokers belong to the lowest socioeconomic group (first quintile).

#### **1.1.1. Smoking products in Indonesia**

Kreteks (pronounced “cree-techs”) are clove cigarettes. Kreteks are popular in Indonesia, and typically contain a mixture consisting of tobacco, cloves and other additives. Broadly speaking, there are two types of manufactured cigarettes in Indonesia—kreteks and white cigarettes. There is also a major market for non-factory made cigarettes, which are clove cigarettes that may be either filtered or unfiltered. The kretek (clove-blended) cigarette dominates the market in both the machine-made and hand-rolled categories. The name kretek is derived from the crackling sound that results from burning of the tobacco–clove mixture. The total sales of machine-made cigarettes (kreteks and white cigarettes) was some 180 billion sticks in 2010, up 4.5% from 2009 (Euromonitor 2011). White cigarettes accounted for some 12% of the total (machine-made) market volume in 2010, the remaining being kreteks. White cigarettes are mainly imported (global) brands and are hampered by the restriction on television advertisements for foreign brands. All global brands except for Marlboro Mix 9 are white cigarettes. Global brands excluding Marlboro Mix 9 are sold in packs of 20 sticks, while local brand clove cigarettes are sold in packs of 12 and 16 sticks. Indonesia is a unique cigarette market because of kreteks and the strength of the “cottage” sector that produces hand-rolled cigarettes. Hand-rolled kreteks are strongly associated with 12-stick packaging. Country local brands of white cigarettes are sold in 20-stick packs.

Indonesian kreteks, both machine-manufactured and hand-rolled, have a higher tar level than white cigarettes (more than 10 mg tar). The most common tar level for “mild” kreteks is 14 mg tar and 1 mg nicotine. Indonesia is one of the world's most attractive cigarette markets and international companies have been keen to establish themselves. The major cigarette manufacturers are Gudang Garam, HM Sampoerna (PMI), Djarum, Bentoel (BAT) and Nojorono. In 2010, the top three cigarette manufacturers accounted for some two thirds of the total machine-made cigarette volume sales, with Gudang Garam being the market leader. (However, if hand-rolled cigarettes were included, total volume sales of Sampoerna would exceed those of Gudang Garam.) Standardized machine-smoking analyses indicate that kreteks deliver more nicotine, carbon monoxide and tar than conventional cigarettes. Kretek smoking is associated with an increased risk of acute lung injury, especially among susceptible individuals with asthma or respiratory infections. Research shows that regular kretek smokers have 13–20 times the risk of abnormal lung function compared with non-smokers.

#### **1.1.2. Tobacco use among specific populations**

The GYTS 2009 in Java and Sumatra showed a smoking prevalence among junior high school students (13–15 years) of 20.3%. About 72.4% of students reported exposure to second-hand smoke at home and 78.1% at public places. The GSPS 2009 showed that tobacco use prevalence among junior high school teachers was 18.9% and among administrative personnel it was 31.3%. The GHPSS among third-year men medical and dental students revealed that the prevalence of cigarette smoking was 19.8% and 39.8%, respectively and use of tobacco products other than cigarette smoking was 2.2% and 4.7%, respectively.

## 1.2. Health and economic impact of tobacco use

Based on the Baseline Health Research 2010, an average of 12 cigarettes sticks is consumed per person per day at an average price of IDR 600.00 per stick; the expenditure for tobacco per person per day is thus IDR 7200.00 or IDR 216 000.00 per person per month. This expenditure is larger than the Conditional Cash Transfer (CCT) programme for poor families of IDR 100 000.00 per family per month.

The total medical expenditure on selected major diseases (629 017 hospitalized cases) attributed to tobacco use in 2010 was IDR 1.85 trillion; these included chronic obstructive pulmonary disease, coronary heart disease, selected neoplasms/cancers and perinatal disorders. It is estimated that there were 1 258 034 ambulatory cases of tobacco-related diseases. With the average expenditure per patient per visit (without subsidy) of IDR 208.337, the total expenditure for ambulatory services in 2010 was IDR 0.26 trillion. It is estimated that in 2010, 190 260 Indonesians (100 680 men and 89 580 women) died due to tobacco-related diseases, accounting for 12.7% of the total deaths in 2010, which was 1 539 288. The total disability-adjusted life years (DALYs) lost due to premature mortality and disabilities in 2010 was 3 533 000 DALYs.

The World Bank and WHO study in 2005 found that low-income households spent 7.2% of their income on tobacco. Affordability of cigarettes has increased in the past decade in Indonesia. Households with smokers spent an average of 11.5% on tobacco products, compared with 11.0% on fish, meat, eggs and milk combined, 2.3% on health and 3.2% on education. Tobacco in Indonesia became 50% more affordable between 1980 and 1998. Cigarette taxes and prices in Indonesia are low relative to other low-income countries and regional averages. Overall, real cigarette prices have remained remarkably stable between 1970 and 2005.

## 1.3. Tobacco control policies

Indonesia is the only country in the South-East Asia Region that has not signed the Framework Convention on Tobacco Control (FCTC); however, Indonesia is committed to implementing the MPOWER policy package (61st Regional Committee resolution). Government Regulation No 81/1999 on Tobacco Control was issued as an implementation document for tobacco control measures stated in the 1992 Health Law. The articles include regulations on advertisements, health warning labels, restrictions on tar and nicotine levels, public disclosure of cigarette content, penalties and enforcement, regulatory authority, public participation and provisions for a smoke-free environment. This regulation, however, did not address issues on economics, liability, sale to minors and sponsorships.

The Government Regulation No 38/2000 on Tobacco Control basically revised the Regulation No 81/1999 on tobacco advertisements (permitting advertisements in the electronic media, in addition to printed and outdoor media) and prolonging the deadline for industries to comply with new regulations to five to seven years, depending on the type of industry. In 2003, the government issued Regulation No 19/2003 which replaced Regulation No 38/2000 and included aspects related to the size and types of messages in health warning labels, time restrictions for advertising in the electronic media and testing of tar and nicotine levels.

The Indonesian Health Law (Law No 36/2009 on Health) states that tobacco and tobacco products are considered as addictive substances and will be regulated to protect the health of the individual, family, community as well as the environment. Based on this law, a government regulation on tobacco control has been prepared; the proposed regulation is still being debated. Besides, in the past seven years, more than 20 local governments (province, district and city) have enacted local laws on smoke-free environments.

The Indonesian Ministry of Health has also appointed a Tobacco Control Focal Point at the Directorate General of Disease Control and Environmental Health to coordinate technical activities and prepare regulations on tobacco control. There are many nongovernment organizations (NGOs) working on tobacco control activities. The Bloomberg Initiative to Reduce Tobacco Use of Bloomberg Philanthropies has supported tobacco control initiatives at the national and subnational levels.



Indonesia implemented GATS in 2011. GATS enhances the country's capacity to design, implement and evaluate tobacco control programmes and provides key indicators for monitoring the MPOWER policy package. An efficient and systematic surveillance mechanism to monitor the epidemic is one of the essential components of a comprehensive tobacco control programme.

#### **1.4. Survey objectives**

The objectives of the GATS are as follows:

- *To systematically monitor adult tobacco use (smoking and smokeless) and track key tobacco control indicators in a nationally representative sample (of the country)*
- *To track implementation of FCTC-recommended policies outlined in the MPOWER package.*

More specifically, the objectives of the survey are to provide up-to-date information on adult tobacco use for both smoked and smokeless tobacco products and key tobacco control measures. The survey also provides an opportunity to compare population estimates of tobacco users at the national level as well as stratified by urban/rural areas and gender.

## 2. Methodology

The GATS is the global standard for systematically monitoring adult tobacco use (smoked and smokeless) and tracking key tobacco control indicators. The GATS is a nationally representative survey, using a consistent and standard protocol across countries, including Indonesia. The data will assist countries to track technical components of the WHO MPOWER package.

### 2.1. Study population

The target population for this survey includes all adult men and women in Indonesia aged 15 years and above. This target population includes all people who consider Indonesia to be their usual place of residence, covering 98.4% of the total population in Indonesia. This definition includes those individuals residing in Indonesia even though they may not be considered a citizen of the country. The only adults who were excluded from the study were those individuals visiting Indonesia, e.g. tourists, those who indicated that their primary place of residence was a military base or group quarters, e.g. a dormitory, and those who were institutionalized—including people residing in hospitals, prisons, nursing homes and other such institutions. In addition, eligible respondents could withdraw from the study at any time. They also had a right to refuse to answer any question without providing a reason for their decision.

### 2.2. Sampling design

The sampling frame used for the GATS Indonesia sample design (*see* Appendix B for details) was a census block (CB), obtained from the Population Census of Indonesia conducted by BPS-Statistics Indonesia in 2010. The survey applied a four-stage stratified cluster sampling. In the first stage, 100 primary sampling units (PSUs) (50 in urban areas and 50 in rural areas) were selected using the probability proportional to size (PPS) sampling technique. The PSU consisted of a group of CBs in a subdistrict within the same type of area (urban/rural). The next stage was to select three secondary sampling units (SSUs), i.e. CBs per selected PSU, also using PPS. After updating the list of population census households in selected CBs, in the third stage, 30 households were selected systematically from the list of updated households. In the final stage, one respondent is randomly selected to participate in the survey.

The explicit stratification used at the first stage of selection was based on urban and rural designations of BPS-Statistics Indonesia, as well as on four regions (Sumatra, Java–Bali, Kalimantan–Nusa Tenggara, and the eastern part of Indonesia). SSUs were based on CBs created for the 2010 Population Census of Indonesia, which generally comprised 80–120 households.

Following the standard protocol of GATS, the initial target was a representative sample of 8000 non-institutionalized households subject to the applicable non-response and eligibility rates (a target sample of 2000 households each in urban, rural, men and women subgroups). After accounting for possible non-response and eligibility rates, it was decided to have an average of 30 households in most of the selected SSUs/CBs, resulting in a total sample size of 8994 non-institutionalized households. As per the design, one respondent was randomly selected for the interview from each selected eligible household to participate in the survey. The Indonesian sample design provides cross-sectional estimates for the country as a whole as well as by urban/rural areas and gender.

### 2.3. Survey questionnaire

GATS Indonesia collected information on a variety of indicators that will assist in monitoring the prevalence of tobacco use. Two types of questionnaires were used – the household questionnaire and the individual questionnaire for all adults aged 15 years and above. The household and individual questionnaires were based on the GATS core questionnaire and optional questions, which were designed for use in countries implementing GATS. These questionnaires were adapted and modified to reflect the relevant issues applicable for the country situation in consultation with the NIHRD, BPS-Statistics Indonesia, WHO Country Office and Technical Committee under the MOH (*see* Appendix D). The adaptations took place during the GATS Technical Workshop conducted in February 2011 in Atlanta, USA in consultation with CDC and WHO Regional Office

for South-East Asia (WHO SEARO). The adapted questionnaires were approved by a questionnaire review committee (QRC). The questionnaires were developed in English and later translated into Indonesian. The questionnaires were also back-translated to English to check the quality of translation before being used for field implementation. The questionnaires were pretested during the pilot conducted in Bogor City and Bogor District in May 2011 and finalized in July after incorporating the changes suggested from the pretest experience.

### 2.3.1. Household questionnaire

The household questionnaire collected information on all the usual residents in the sampled household to identify eligible persons from the household and capture their basic information so that a random eligible respondent could be selected for the individual questionnaire. For all listed household members, basic information on age and gender was collected. The information on age was used to identify an eligible random respondent for the individual questionnaire. The questionnaire also collected information on the current use of smoked and smokeless tobacco.

### 2.3.2. Individual questionnaire

The individual questionnaire collected information from eligible selected individuals aged 15 years and above. The individual questionnaire consisted of the following 10 sections:

- *Background characteristics*: Questions on gender, age, education, occupation and possession of household items
- *Tobacco smoking*: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), former/past tobacco consumption, age at initiation of daily smoking, consumption of different tobacco products, (cigarettes, kretek cigarettes, pipes, cigars), nicotine dependence and frequency of quit attempts
- *Smokeless tobacco*: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), and former/past use of smokeless tobacco
- *Electronic cigarettes*: Questions covering patterns of use (daily consumption, less than daily consumption, not at all) of electronic cigarettes
- *Cessation*: Questions on advice to quit smoking by a health-care provider, method used to try to stop smoking and thinking about quitting smoking
- *Second-hand smoke*: Questions on smoking allowed in the home, exposure to second-hand smoke at home, indoor smoking policy at the workplace, exposure in the past 30 days at the workplace, government buildings/offices, universities/educational facilities, religious facilities, health-care facilities, restaurants/bars/night clubs and public transportation
- *Economics—manufactured white cigarettes*: Questions covering the type of manufactured white cigarette product and quantity bought, cost of manufactured white cigarette product(s), brand, type of product purchased and source of manufactured white cigarette product(s)
- *Economics—kretek cigarettes*: Questions covering the type of kretek cigarette product and quantity bought, cost of kretek cigarette product(s), brand and type of product purchased and source of kretek cigarette product(s)
- *Media*: Questions on exposure to advertisement – television, radio, billboards, posters, newspapers/magazines, cinema, internet, public transportation, public walls and others; 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 packages and exposure to anti-tobacco advertising and information. These questions were asked for both white manufactured cigarettes and kretek cigarettes. The reference period for the questions in this section was 30 days.
- *Knowledge, attitudes and perceptions*: Questions regarding knowledge about the health effects of using both smoked and smokeless tobacco.

## 2.4. Questionnaire programming and preparation for electronic data collection

The GATS was the first survey ever conducted in Indonesia which used electronic means of data collection to collect the information on both household and individual questionnaires. For this purpose, the General Survey System (GSS) was used, which is a suite of software tools developed to facilitate the administration, collection and management of survey data on handheld computers, specifically a Microsoft Windows-based platform running Windows Mobile 5.0 or Mobile 6.0, often called pocket PC systems. The software system is designed to support field data collection activities, where field

interviewers collect data using handheld computers. The systems were developed and tested using the Hewlett Packard (HP) iPAQ Pocket PC (Model: iPAQ 210) and were used for data collection. (Please refer to the manuals on GSS and Data Management and Implementation Guidelines for more details.) Electronic data collection was useful for facilitating the complex skip pattern used in the GATS Indonesia questionnaire as well some inbuilt validity checks on questions during the data collection.

The programming of the questionnaire using GSS was carried out in collaboration with in-country information technology (IT) personnel, WHO and CDC. Repeated quality-control mechanisms were used to test the quality of questionnaire programming. The main steps involved in quality control checks were version checking for household and individual questionnaires, checking date and time, and skipping patterns. The entire process, including the questionnaire, data collection using handheld machines and data aggregation to prepare raw data for analysis, was pretested.

Handheld programming was finalized and the final questionnaire for data collection was uploaded onto the handheld devices in August 2011 by in-country IT personnel, with WHO and CDC providing oversight to maintain quality assurance. The case file containing the electronic information used for identifying the selected household addresses was also uploaded to the handhelds in September 2011, immediately after household activities and selection of households had been updated and completed. (Please refer to the GATS Quality Assurance Manual for more details on case file and a complete listing of quality control measures adopted in GATS.)

## **2.5. Recruitment, training and fieldwork**

### **2.5.1. Implementing agencies**

BPS-Statistics Indonesia and NIHRD were the implementing agencies for GATS in Indonesia. The MoH designated the BPS as the main implementing agency responsible for sampling, updating of households, and conducting training and data collection for GATS implementation, while NIHRD was responsible for writing the country report, preparing the fact sheet and disseminating the results nationally.

WHO provided regional and in-country coordination and CDC provided technical assistance for implementation of the survey. Financial assistance was provided by Bloomberg Philanthropies under the Bloomberg Global Initiative to Reduce Tobacco Use.

The MoH had also established an in-country technical committee. This committee consisted of experts and senior representatives from the MoH (NIHRD) and BPS-Statistics Indonesia. Refer to Appendix D for details on the technical committee and personnel involved in survey implementation.

### **2.5.2. Pretest**

BPS-Statistics Indonesia conducted a pretest to test the questionnaire, especially in terms of wording and comprehensibility, inconsistencies in skip patterns, sequencing of questions, completeness of response categories, work load, interview time, availability, call backs and any other issues. Another important objective of the pretest was to test the programmed questionnaire for handheld data collection and assess problems in the process of data transfer and aggregation. Pretest training took place during 9–11 May 2011. Seven people were trained during the training programme, of whom two were selected to perform the tasks of a supervisor and five to conduct the interviews and do the actual field work during the pretest. Training was conducted based on standard GATS manuals and procedures, including class presentation, mock interviews, field practices and tests. Pretest fieldwork was carried out during 12–20 May 2011. Fieldwork was conducted for a purposive sample of 210 households, with 120 households in Bogor Regency and the remaining 90 in Bogor City, distributed by gender, urban/rural and smoking status. An attempt was made to obtain a good representation of individuals from different age groups.

### **2.5.3. Training**

In order to maintain uniform survey procedures and follow standard protocols established in GATS, four manuals were developed. The field interviewer manual consists of instructions for interviewers regarding interviewing techniques, field procedures, method of asking questions and, most importantly, the use of handheld devices for data collection. The field supervisor manual contains a detailed description on the role and responsibilities of the supervisor. It also contains information on data aggregation and transfer procedures for supervisors. The question-by-question specifications manual provides question-by-question instructions to the field interviewers on administering the GATS household and individual questionnaires using the handheld computer. It also contains information on range checks, response options, and purpose and instructions on each question included in the survey. All the manuals were first developed in English and then translated into Indonesian for the training. A total of 100 interviewers and 81 supervisors were trained in 12 regional training centres for a period of three days (for a few participants) or four days (for more participants) in the beginning of October 2011. This training was facilitated by two facilitators (one for the questionnaire and one for IT) who had been trained separately by a GATS team member in Jakarta prior to this training. The facilitator training was conducted at the end of September 2011. Training included lectures on understanding the contents of the questionnaires, how to complete the questionnaires using handheld devices, mock interviews between participants and field practice interviews.

#### **2.5.4. Updating of the household list**

Updating of the household list was the first GATS activity in the field after the pretest implementation. BPS-Statistics Indonesia Headquarters prepared the list of households from the 2010 Population Census of Indonesia for each selected CB and sent the list to the BPS-Regional Office. In each selected CB, the list of households was updated in order to obtain the up-to-date household conditions within the CB. In carrying out the updating, the field enumerator utilized a map of the selected SSU (CB) used during the 2010 Population Census. Personnel of the BPS-Regional Office worked at the field level to update the relevant information of the household as per the current situation. The updating operation was conducted in September 2011. After all households in the selected CB had been updated, the up-to-date lists of households were then sent back to the BPS-Statistics Indonesia Headquarters as an up-to-date frame for household sample selection. The selected households were then prepared as a case file to be put into the handheld devices.

#### **2.5.5. Fieldwork**

The GATS data was collected in 19 provinces, 77 districts and 100 PSUs by 100 field interviewers and 81 field supervisors (FSs). All field interviewers and FSs were personnel of the BPS regional offices. Both field interviewers and FSs came from the same BPS regional office at district level in order to maintain good coordination and ensure speedy data collection. Field operations took place over a period of four weeks from 15 October 2011 to 24 November 2011.

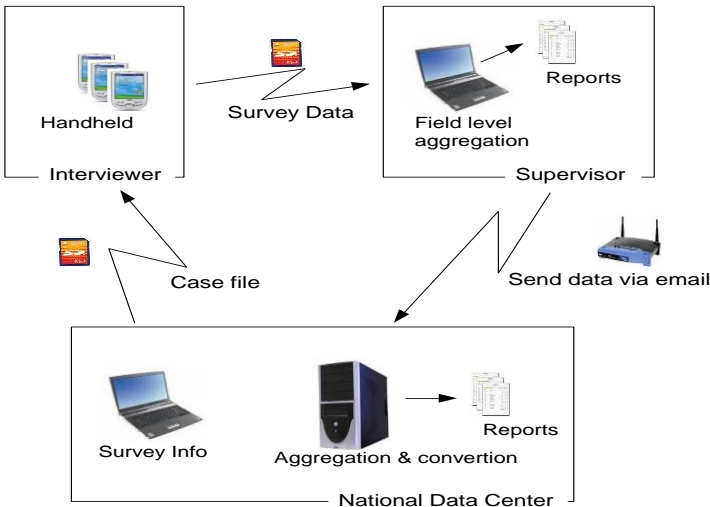
Field interviewers were responsible for collecting information on questionnaires using handheld devices. FSs were responsible for the overall operation of the field enumeration. In addition, the FSs conducted spot checks to verify information collected by interviewers and also to ensure the accuracy of household identification in the field. In order to ensure that the standard quality-control procedures has been implemented correctly by the field interviewers, key members of the GATS team visited the field to monitor data collection. FSs were also responsible for aggregating the interviewer-level data to the secure digital (SD) card provided to make a back-up; and using a card reader through internet connection available in the BPS-Regional Office, the FSs then sent the data to the data centre at the BPS-Statistics Indonesia Headquarters.

### **2.6. Data processing and aggregation**

All the data containing interviews conducted on each day were aggregated by FSs on a weekly basis for GATS fieldwork data collection. Each supervisor exported the data from the field interviewer's handheld device into his/her SD card using a card reader and then e-mailed the exported data from the BPS-Regional Office to the National Data Centre at the BPS-Statistics Indonesia Headquarters. This data transmission process followed a partial network or Model B of the GATS standard data collection mechanism, as shown in Figure 2.1. In-country IT personnel aggregated the data that they had received from all supervisors every three/four days (Figure 2.1). On the final aggregation day, IT personnel with guidance from WHO IT

experts merged and aggregated all the files to a single standard data file (SDF). The aggregated final file was then ready for the weighting process. After the weighting process had been approved by the Survey Review Committee (SRC), the data were transposed to an analysable raw data format that could be read in any statistical software available for further analysis and reporting.

**Figure 2.1:** Data transmission process-GATS Indonesia, 2011



**2.7. Statistical analysis**

Complex survey data analysis was performed to obtain population estimates and their 95% confidence intervals. Sample weights were developed for each respondent following the standard procedures established in the GATS sample design and sample weights manuals for GATS data. The details on sample weighting process are described in Appendix B. The final weights were used in all analyses to produce estimates of population parameters and their confidence intervals. All weighting computations were carried out using SPSS and cross-verified using SAS for additional quality assurance and all computations of estimates and their confidence intervals were performed using the SPSS 18 complex samples module.

### 3. Sample and population characteristics

This chapter presents information on sample coverage and characteristics of the population. The population estimates are based on the 2010 Population Census, which was projected to September 2011 in order to represent the population characteristics at the time of the survey.

#### 3.1. Coverage of the sample

Table 3.1 shows the unweighted number and percentage of households and persons interviewed, and response rates by place of residence. Of the 8994 households selected for the survey, 8581 (95.4%) completed the household interview; and 8305 (96.8%) selected eligible persons successfully completed the individual interview. The total response rate of the survey was 94.3%. The total response rate in rural areas was found to be higher than that in urban areas (95.0% and 93.6%, respectively). The household response rate was 97.4%. With respect to urban and rural household response rates, the latter had a higher rate than the former (98.2% for rural and 96.6% for urban areas). However, 2.4% households were found unoccupied in urban areas, while only 1.5% were unoccupied in rural areas. Nobody was at home in 1.2% cases in both urban and rural areas. The number of eligible persons in urban areas (4238) was slightly lower than that in rural areas (4343). The person-level response rate was found to be 96.8% and there were no differences with respect to urban and rural person-level response rates. The principal reasons for person-level non-response were—not at home (1.8%), incapacitated (1.0%) and refused (0.3%). The proportion of not-at-home persons was higher in urban areas (1.9%) compared to rural areas (1.6%). On the other hand, the proportion of incapacitated persons was higher in rural areas than in urban areas, 1.2% and 0.8%, respectively.

#### 3.2. Characteristics of survey respondents

Table 3.2 presents the unweighted sample size and population estimates by gender and selected demographic socioeconomic characteristics of the household population, including age, place of residence, level of education and occupation/work status.

The unweighted sample count (complete responses) was 8305. The estimated total Indonesian population aged 15 years and above was 172.1 million in 2011. In classifying sample distribution by gender, the survey enumerated a total of 3948 men and 4357 women. These sample counts yielded a *de facto* population estimate of 85.9 million men and 86.2 million women. The number of unweighted samples in urban areas was smaller than that in the rural areas (4102 and 4203 samples, respectively). However, the weighted population in urban areas was slightly higher than in rural areas (86.4 million in urban and 85.8 million in rural areas). A large proportion of adults were between 25 and 44 years of age (45.1%), 24.1% were in the 15–24 years age group, followed by 23.7% in the 45–64 years age group and 7.1% in the age group of 65 years and above. A similar proportion was observed not only among adult men but also among adult women. For example, 24.3% of adult men were in the 15–24 years age group, 24% in the 45–64 years age group and only 6.3% in the last age group of 65 years and above. The majority of adult men were in the 25–44 years age group amounting to 45.4% of total adult men. Similarly, the largest proportion of adult women was also in the 25–44 years age group. The proportion of persons in the other age groups were 24.0%, 23.4%, and 7.8% in the 15–24, 45–66, and 65 years and above age groups, respectively.

For all eligible respondents aged 15 years and above, data were collected on the highest level of education completed. For the purpose of this report, the educational level was grouped into five different categories – less than primary school completed, primary school completed, secondary school completed, high school completed and college/university and above. A large proportion of the sample was primary school completed (27.2%) followed by high school completed (23.0%). On the other hand, college and university graduates constituted only 6.8%. Distribution of adult men and women across educational levels showed that the majority of both adult men and women had also only completed primary school certificate (26.4% and 28.1%, respectively). Adult men were more educated than adult women. As shown in the table, the proportion of adult men who had completed secondary school was more than that of adult women. The proportion of adult



men who were college/university graduates was 7.3%, whereas it was 6.4% for their women counterparts. The proportion of secondary school completed and high school completed was 21.3% for men and 20.6% for women, and 26.1% for men and 19.9% for women, respectively. On the other hand, the proportion of adult women with less than primary school completed was much higher than that of adult men, 25.1% for women and 18.8% for men.

The 2011 GATS individual questionnaire asked all respondents their main work status in the 12 months preceding the survey. The various categories were merged to form five exclusive occupation categories – employed, self-employed, student, home maker and unemployed. This categorization was used throughout the report for depicting differentials in various indicators. Table 3.2 presents the data on occupation. Overall, 28.5% of all adults were employed, 34.3% were self-employed and 21.3% reported to be home makers. The proportion of adults who were students was 8.1%. Only 7.8% of the total population was unemployed. When this proportion was broken down by gender, more than 40% of adult women were home makers, which was the largest proportion among occupation levels; whereas for adult men, the majority were self-employed (44.3%). The second-largest occupation group for adult men was employed at 37.8%, while self-employed (24.3%) was the second-largest occupation group for adult women. The third-largest group was students (9.2%) for men, and employed (19.2%) for women. The unemployed category was more prominent among adult men (8.5%) than among adult women (7.2%) as the fourth-largest group. The smallest proportion was home-makers (0.1%) for adult men, and students (7%) for adult women.

**Table 3.1.** Number and percentage of households and persons interviewed and response rates by residence (unweighted) – GATS Indonesia, 2011

Demographic characteristics	Residence				Total	
	Urban		Rural			
	N	%	N	%	N	%
<b>Selected households</b>						
Completed, person selected for interview	4238	94.2	4343	96.6	8581	95.4
Completed, no one eligible for interview	2	0.0	2	0.0	4	0.0
Incomplete	3	0.1	0	0.0	3	0.0
No screening respondent	48	1.1	16	0.4	64	0.7
Nobody at home	55	1.2	54	1.2	109	1.2
Refused	27	0.6	8	0.2	35	0.4
Unoccupied	108	2.4	68	1.5	176	2.0
Address not a dwelling	4	0.1	1	0.0	5	0.1
Other	14	0.3	3	0.1	17	0.2
Total households selected	4499	100	4495	100	8994	100
Household response rate <sup>1</sup>	96.6%		98.2%		97.4%	
<b>Selected persons</b>						
Completed	4102	96.8	4203	96.8	8305	96.8
Incomplete	1	0.0	4	0.1	5	0.0
Not eligible	2	0.0	2	0.0	4	0.0
Not at home	81	1.9	70	1.6	151	1.8
Refused	18	0.4	10	0.2	28	0.3
Incapacitated	32	0.8	53	1.2	85	1.0
Other	2	0.0	1	0.0	3	0.0
Total eligible persons	4238	100	4343	100	8581	100
Person-level response rate <sup>2</sup>	96.8%		96.8%		96.8%	
Total response rate	93.6%		95.0%		94.3%	

1. Calculate Household Response Rate (HRR) by:

$$\frac{100 * [HC]}{[HC] + [HINC] + [HNS] + [NHH] + [HR] + [HO]}$$

where (Selected households): HC = "Completed, person selected for interview"; HINC = "Incomplete"; HNS = "No screening respondent"; NHH = "Nobody home"; HR = "Refused"; HO = "Other"

2. Calculate Person-Level Response Rate (IRR) by:

$$\frac{100 * [PC]}{[PC] + [PINC] + [PNAH] + [PR] + [PI] + [PO]}$$

where (Selected persons): PC = "Completed"; PINC = "Incomplete"; PNAH = "Not at home"; PR = "Refused"; PI = "Incapacitated"; PO = "Other"

3. Calculate Total Response Rate (TRR) by: (HRR \* IRR) / 100

Notes: 1) Notice that Household questionnaire incomplete [HINC] was not included in the numerator of the household response rate. Therefore, a household screening questionnaire that is incomplete (i.e., the roster could not be finished) was considered a nonrespondent to the GATS. 2) Completed individual interview [PC] includes respondents who have completed at least question E1 and who provide valid answers to questions B1/B2/B3 and C1/C2/C3 (when applicable). Therefore, the respondents who did not meet this criteria were considered as an eligible nonrespondent to GATS and thus, incompletes [PINC] were not included in the numerator of the individual response rate.

**Table 3.2:** Distribution of adults ≥ 15 years old by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Overall			Male			Female		
	Weighted		Unweighted Number of Adults	Weighted		Unweighted Number of Adults	Weighted		Unweighted Number of Adults
	Percentage (95% CI) <sup>1</sup>	(in thousands)		Percentage (95% CI) <sup>1</sup>	(in thousands)		Percentage (95% CI) <sup>1</sup>	(in thousands)	
<b>Overall</b>	100	172,125.7	8,305	100	85,897.8	3,948	100	86,227.9	4,357
<b>Gender</b>									
Male	49.9 (48.6, 51.2)	85,897.8	3,948	NA	NA	NA	NA	NA	NA
Female	50.1 (48.8, 51.4)	86,227.9	4,357	NA	NA	NA	NA	NA	NA
<b>Age (years)</b>									
15-24	24.1 (22.7, 25.7)	41,553.1	1,408	24.3 (22.4, 26.4)	20,898.2	674	24.0 (22.1, 25.9)	20,654.9	734
25-44	45.1 (43.6, 46.6)	77,621.0	3,883	45.4 (43.3, 47.5)	38,979.0	1,870	44.8 (43.0, 46.6)	38,642.0	2,013
45-64	23.7 (22.6, 24.8)	40,786.6	2,218	24.0 (22.4, 25.5)	20,575.0	1,072	23.4 (22.0, 24.9)	20,211.6	1,146
65+	7.1 (6.2, 8.0)	12,164.9	796	6.3 (5.5, 7.3)	5,445.6	332	7.8 (6.8, 9.0)	6,719.3	464
<b>Residence</b>									
Urban	50.2 (48.8, 51.6)	86,373.0	4,102	50.2 (48.2, 52.2)	43,133.6	1,972	50.1 (48.3, 52.0)	43,239.5	2,130
Rural	49.8 (48.4, 51.2)	85,752.7	4,203	49.8 (47.8, 51.8)	42,764.2	1,976	49.9 (48.0, 51.7)	42,988.5	2,227
<b>Education Level</b>									
Less than primary school completed	22.0 (19.3, 24.9)	37,793.8	2,131	18.8 (16.1, 21.8)	16,153.0	849	25.1 (22.2, 28.3)	21,640.8	1,282
Primary school completed	27.2 (24.9, 29.7)	46,872.0	2,288	26.4 (23.8, 29.2)	22,688.3	1,068	28.1 (25.6, 30.7)	24,183.7	1,220
Secondary school completed	20.9 (19.4, 22.6)	36,042.6	1,525	21.3 (19.5, 23.3)	18,302.8	747	20.6 (18.7, 22.6)	17,739.8	778
High school completed	23.0 (20.7, 25.5)	39,556.0	1,785	26.1 (23.4, 29.0)	22,451.7	983	19.9 (17.5, 22.4)	17,104.3	802
College or University +	6.8 (5.7, 8.2)	11,778.1	573	7.3 (6.1, 8.8)	6,301.9	301	6.4 (5.1, 8.0)	5,476.2	272
<b>Occupation/Work status</b>									
Employed	28.5 (25.5, 31.6)	48,975.7	2,341	37.8 (33.8, 42.0)	32,464.0	1,516	19.2 (16.5, 22.1)	16,511.7	825
Self-employed	34.3 (31.0, 37.8)	59,035.7	3,013	44.3 (40.4, 48.4)	38,076.4	1,843	24.3 (20.8, 28.2)	20,959.3	1,170
Students	8.1 (7.1, 9.3)	13,950.1	477	9.2 (7.9, 10.8)	7,937.8	265	7.0 (5.8, 8.4)	6,012.3	212
Home makers	21.3 (19.5, 23.2)	36,653.9	1,855	0.1 (0.0, 0.2)	85.7	5	42.4 (39.1, 45.8)	36,568.2	1,850
Un-employed	7.8 (6.9, 8.9)	13,463.8	616	8.5 (7.3, 9.9)	7,294.6	317	7.2 (6.1, 8.4)	6,169.2	299

Note: The following observations were missing: 3 for occupation and 3 for education. NA - Not Applicable.

<sup>1</sup> 95 % Confidence Interval.

## 4. Tobacco Use

This chapter presents data on tobacco use and includes information on two commonly used tobacco products in Indonesia, i.e. smoked tobacco products and smokeless tobacco products. Smoked tobacco products include manufactured, hand-rolled and kretek cigarettes, and other smoked tobacco products. Different sections in this chapter present a detailed overview of smoking status, the number of smoked tobacco products used on a daily and non-daily basis, age at initiation of smoking, time since quitting smoking and time after waking up to first smoke of the day.

### **Key findings**

- *59.8 million adults (34.8% –67.0% men and 2.7% women) currently smoke tobacco and 2.9 million adults (1.7%) currently use smokeless tobacco products.*
- *Kretek cigarettes (31.5%) are the most popular tobacco product used in Indonesia.*
- *On an average, 12.8 cigarette sticks are smoked per day.*
- *Average age at daily smoking initiation is 17.6 years; 12.3% started smoking before 15 years of age.*
- *Of those who have ever smoked on a daily basis, 9.5% have quit smoking.*
- *Among daily smokers, 38.3% have the first cigarette of the day within 5–30 minutes of waking up.*

### **4.1. Prevalence of tobacco use**

#### **4.1.1. Prevalence of smoking**

Table 4.1 gives the prevalence of smoking tobacco by “current tobacco smokers” and “non-smokers”. Current tobacco smokers include “daily smokers” and “occasional smokers”. Non-smokers include “former daily smokers” and “never daily smokers”. The overall prevalence rate of current smokers is 34.8%. It is particularly high among men (67.0%), who have 30 times the prevalence rate of women (2.7%).

**Table 4.1:** Percentage of adults ≥15 years old, by detailed smoking status and gender – GATS Indonesia, 2011.

Smoking Status	Overall	Male	Female
		<i>Percentage (95% CI)</i>	
<b>Current tobacco smoker</b>	34.8 (33.2, 36.4)	67.0 (64.4, 69.5)	2.7 (2.0, 3.5)
Daily smoker	29.2 (27.6, 30.9)	56.7 (53.8, 59.6)	1.8 (1.4, 2.4)
Occasional smoker	5.6 (4.8, 6.4)	10.3 (9.0, 11.8)	0.8 (0.5, 1.3)
Occasional smoker, formerly daily	2.1 (1.6, 2.6)	4.0 (3.1, 5.0)	0.2 (0.1, 0.3)
Occasional smoker, never daily	3.5 (3.0, 4.1)	6.4 (5.4, 7.5)	0.7 (0.4, 1.1)
<b>Non-smoker</b>	65.2 (63.6, 66.8)	33.0 (30.5, 35.6)	97.3 (96.5, 98.0)
Former daily smoker	3.3 (2.8, 3.9)	6.0 (5.0, 7.2)	0.6 (0.4, 1.0)
Never daily smoker	61.9 (60.3, 63.5)	27.0 (24.6, 29.5)	96.7 (95.8, 97.5)
Former occasional smoker	3.2 (2.6, 3.9)	4.9 (4.0, 6.1)	1.5 (1.0, 2.0)
Never smoker	58.7 (57.0, 60.5)	22.0 (19.6, 24.6)	95.3 (94.0, 96.3)

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

Non-smokers account for 65.2% of the overall adult population. Among them, only 3.3% are former daily smokers and 61.9% are never daily smokers. The proportion of never smokers among women is 95.3% while that among men is 22.0%.

#### 4.1.2. Prevalence of smokeless tobacco use

Table 4.1A gives the use of smokeless tobacco by gender. Current smokeless tobacco use is low, with an overall prevalence rate of only 1.7%. Among current smokeless tobacco users, 1.2% are daily users and 0.5% are occasional users. Women (1.3%) use smokeless tobacco more than men (1.1%) on a daily basis. Overall, 98.3% are non-users of smokeless tobacco, of whom only 0.5% are former daily users and 1.0% are former occasional users.

**Table 4.1A.** Percentage of adults 15 years and above, by detailed smokeless tobacco use status, gender and residence – GATS Indonesia, 2011

Smokeless tobacco use status	Overall	Male	Female
		<i>Percentage (95% CI)</i>	
<b>Current smokeless tobacco users</b>	1.7 (1.4, 2.2)	1.5 (1.1, 2.2)	2.0 (1.4, 2.7)
Daily users	1.2 (0.9, 1.5)	1.1 (0.8, 1.6)	1.3 (0.9, 1.8)
Occasional users	0.5 (0.3, 0.9)	0.4 (0.2, 0.9)	0.7 (0.4, 1.2)
Occasional users, formerly daily	0.1 (0.0, 0.2)	0.1 (0.0, 0.5)	0.1 (0.0, 0.2)
Occasional users, never daily	0.4 (0.3, 0.7)	0.3 (0.2, 0.6)	0.6 (0.3, 1.1)
<b>Non-users of smokeless tobacco</b>	98.3 (97.8, 98.6)	98.5 (97.8, 98.9)	98.0 (97.3, 98.6)
Former daily users	0.5 (0.3, 0.8)	0.3 (0.1, 0.8)	0.7 (0.4, 1.0)
Never daily users	97.8 (97.2, 98.2)	98.2 (97.3, 98.8)	97.4 (96.5, 98.0)
Former occasional users	1.0 (0.6, 1.6)	0.7 (0.3, 1.3)	1.4 (0.8, 2.4)
Never users	96.8 (95.9, 97.5)	97.5 (96.3, 98.4)	96.0 (94.6, 97.0)

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

## 4.2. Number of tobacco users

### 4.2.1. Number of smoked tobacco users

Table 4.2 presents the estimated number of adult smokers corresponding to the prevalence estimates presented on smoking status in Table 4.1 by gender. The estimated number of adult smokers in Indonesia is 59.9 million (57.6 million men and 2.3 million women). The number of daily smokers is 50.3 million and the number of occasional smokers is 9.6 million). The estimated number of non-smokers is 112.2 million, of whom 5.7 million are former daily smokers and 106.6 million are never daily smokers.

**Table 4.2:** Number of adults ≥15 years old, by detailed smoking status and gender – GATS Indonesia, 2011.

Smoking Status	Overall	Male	Female
<i>Number in thousands</i>			
<b>Current tobacco smoker</b>	59,884.5	57,586.8	2,297.7
Daily smoker	50,302.1	48,736.1	1,565.9
Occasional smoker	9,582.4	8,850.6	731.7
Occasional smoker, formerly daily	3,539.1	3,393.7	145.4
Occasional smoker, never daily	6,043.3	5,457.0	586.3
<b>Non-smoker</b>	112,241.2	28,311.0	83,930.2
Former daily smoker	5,665.3	5,148.1	517.2
Never daily smoker	106,575.9	23,162.8	83,413.1
Former occasional smoker	5,501.5	4,246.0	1,255.5
Never smoker	101,074.4	18,916.9	82,157.5

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

#### 4.2.2. Number of smokeless tobacco users

Table 4.2A presents the total population corresponding to the prevalence estimates presented on smokeless tobacco users' status in Table 4.1A by gender. The estimated number of current users of smokeless tobacco is 2.9 million (1.3 million men and 1.6 million women). The number of daily smokeless tobacco users is 2.0 million; 0.9 million are men and 1.1 million are women. The number of occasional smokeless tobacco users is 0.9 million. Out of 166.2 million non-users of smokeless tobacco, only 0.8 million adults are reported to be former daily users whereas 165.4 million are never daily users. Among never daily users, 163.7 million reported that they have never used any smokeless tobacco in their lifetime.

**Table 4.2A:** Number of adults ≥15 years old, by detailed smokeless tobacco use status and gender – GATS Indonesia, 2011.

Smokeless Tobacco Use Status	Overall	Male	Female
<i>Number in thousands</i>			
<b>Current smokeless tobacco user</b>	2,932.7	1,277.3	1,655.3
Daily user	2,007.1	928.4	1,078.8
Occasional user	925.5	348.9	576.6
Occasional user, formerly daily	166.1	90.4	75.7
Occasional user, never daily	759.5	258.6	500.9
<b>Non-user of smokeless tobacco</b>	166,217.6	83,063.3	83,154.3
Former daily user	811.1	239.3	571.8
Never daily user	165,406.5	82,824.0	82,582.5
Former occasional user	1,733.8	557.0	1,176.8
Never user	163,672.7	82,267.0	81,405.7

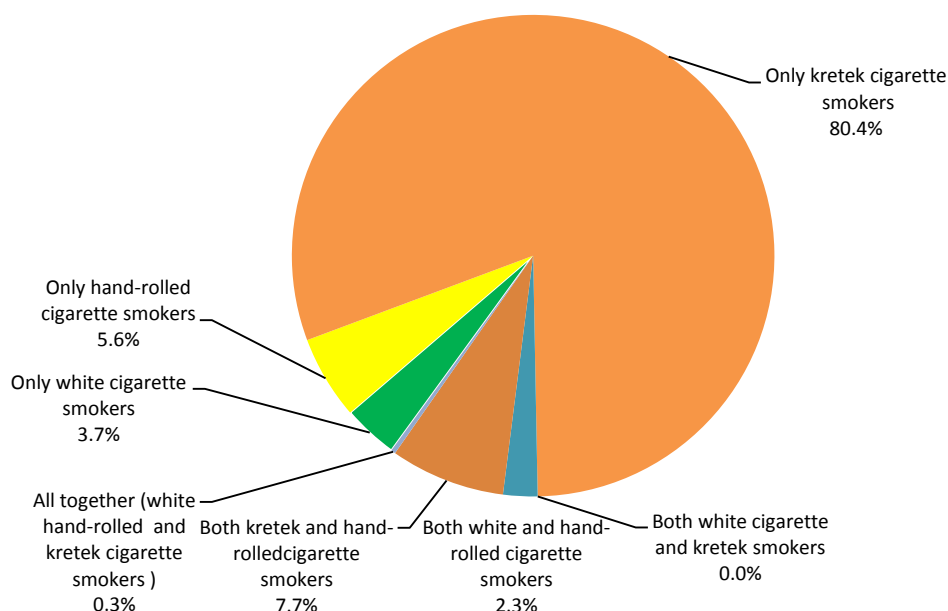
Note: Current use includes both daily and occasional (less than daily) use.

#### 4.3. Prevalence of current smokers by smoked tobacco products

Table 4.3 presents data on smoked tobacco products overall and separately by demographic characteristics. In Indonesia, these products include cigarettes, kreteks, and other smoked tobacco products such as pipes, cigars, *shisha* and others. Cigarettes are of two categories – white cigarettes and hand-rolled cigarettes. The overall prevalence rate of smokers of any smoked tobacco product is 34.8%. The prevalence of current kretek smoking is reported as 31.5%, followed by hand-rolled cigarette smoking (4.7%), white cigarette smoking (2.2%) and the least

for other smoked products (0.3%). Figure 4.1 presents a detailed distribution of the prevalence of various smoking products.

**Figure 4.1.** Type of products smoked among current cigarette smokers – GATS Indonesia, 2011



*Note:* All figures are in percentages.

Current smoking is more prevalent in the age group of 25 – 44 and 45 - 64 years as compared to the younger (15–24 years) and older age groups (65+ years). Kretek smoking is more prevalent in the age group of 25–64 years as compared to the younger (15–24 years) and older age groups (65+ years), while hand-rolled cigarette smoking showed a definite increasing trend with age. White cigarette smoking did not differ by age.

Smoking is more prevalent in rural areas as compared to urban areas. Kretek and hand-rolled cigarette smoking is more prevalent in rural areas as compared to urban areas. White cigarette smoking is more prevalent in urban areas. Other smoking products did not differ by residence.

The prevalence rate of any smoked tobacco product is highest among those with less than primary school education (38.0%) and lowest among those with college or university education (27.6%). Kretek smoking did not show any difference by educational category, while hand-rolled cigarette smoking was higher among the less educated (less than primary, and primary) as compared to those who were more educated (high school and college/university educated). White cigarette smoking is higher more in college/university educated people as compared to less educated people (primary or less than primary).

Current smoking is higher among employed and self-employed categories as compared to the unemployed category. Kretek smoking was higher among the employed and self-employed categories as compared to the unemployed category; however, this pattern was not seen in hand-rolled and white cigarette smoking.

Table 4.3 (continued) also presents data on smoked tobacco products overall and by demographic characteristics separately for men and for women.

**Table 4.3(cont):** Percentage of adults ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristic	Any smoked tobacco product	Type of Cigarette				Other smoked tobacco <sup>2</sup>
		Any cigarette <sup>1</sup>	White <sup>†</sup>	Hand-rolled	Kretek	
		Percentage(95% CI)				
<b>Male</b>						
<b>Age (years)</b>						
15-24	67.0 (64.4, 69.5)	67.0 (64.4, 69.5)	4.3 (3.2, 5.8)	9.0 (6.7, 12.0)	60.9 (57.9, 63.8)	0.5 (0.3, 1.1)
25-44	51.7 (47.1, 56.3)	51.7 (47.1, 56.3)	3.7 (2.4, 5.7)	2.2 (1.1, 4.4)	50.0 (45.2, 54.7)	0.8 (0.3, 2.4)
45-64	73.3 (70.2, 76.1)	73.3 (70.2, 76.1)	5.8 (4.2, 8.0)	7.1 (4.6, 10.7)	67.4 (64.0, 70.6)	0.4 (0.2, 1.0)
65+	72.4 (68.1, 76.3)	72.4 (68.1, 76.3)	2.2 (1.2, 4.1)	14.7 (11.2, 19.0)	64.6 (60.1, 68.8)	0.3 (0.1, 1.0)
	61.2 (54.9, 67.1)	61.0 (54.8, 67.0)	3.3 (1.6, 6.4)	27.2 (20.8, 34.7)	42.5 (36.1, 49.1)	0.9 (0.2, 4.1)
<b>Residence</b>						
Urban	61.6 (58.2, 65.0)	61.6 (58.2, 65.0)	5.5 (3.6, 8.2)	4.6 (2.8, 7.5)	55.3 (51.1, 59.3)	0.6 (0.2, 1.7)
Rural	72.5 (68.7, 76.0)	72.5 (68.6, 76.0)	3.1 (2.0, 4.6)	13.5 (9.4, 18.9)	66.6 (62.4, 70.5)	0.5 (0.2, 1.0)
<b>Education Level</b>						
Less than primary school completed	81.0 (76.5, 84.9)	81.0 (76.5, 84.9)	1.9 (1.1, 3.3)	23.2 (17.3, 30.4)	69.9 (64.0, 75.1)	0.4 (0.1, 1.5)
Primary school completed	74.0 (70.3, 77.4)	74.0 (70.2, 77.4)	2.7 (1.6, 4.5)	12.1 (8.7, 16.6)	67.3 (62.6, 71.8)	0.1 (0.0, 0.7)
Secondary school completed	62.3 (58.0, 66.4)	62.3 (58.0, 66.4)	4.1 (2.6, 6.6)	3.1 (1.8, 5.3)	58.9 (54.4, 63.3)	0.3 (0.1, 1.1)
High school completed	58.7 (55.2, 62.0)	58.7 (55.2, 62.0)	6.6 (4.8, 9.0)	2.4 (1.4, 4.2)	53.6 (49.8, 57.4)	0.8 (0.3, 1.9)
College or University +	49.8 (43.2, 56.4)	49.8 (43.2, 56.4)	8.4 (4.8, 14.3)	2.0 (0.7, 5.5)	46.3 (39.7, 53.1)	1.9 (0.5, 7.0)
<b>Occupation/Work status</b>						
Employed	69.8 (66.3, 73.1)	69.8 (66.2, 73.1)	4.5 (3.1, 6.6)	8.2 (5.4, 12.4)	64.1 (60.2, 67.8)	0.5 (0.2, 1.3)
Self-employed	75.7 (72.3, 78.8)	75.7 (72.3, 78.8)	4.4 (3.1, 6.2)	11.8 (8.8, 15.8)	68.0 (64.0, 71.8)	0.5 (0.2, 0.9)
Students	25.1 (19.6, 31.4)	25.1 (19.6, 31.4)	2.6 (1.2, 5.2)	0.5 (0.1, 3.4)	24.1 (18.7, 30.5)	0.5 (0.1, 3.6)
Home makers	--	--	--	--	--	--
Un-employed	55.4 (48.5, 62.1)	55.4 (48.5, 62.1)	4.6 (2.5, 8.2)	6.8 (4.0, 11.2)	49.4 (42.5, 56.4)	0.9 (0.2, 3.8)

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

<sup>1</sup> Includes white cigarette, hand rolled and kretek cigarettes.

<sup>2</sup> Includes (pipes full of tobacco, cigars, shisha sessions, and any others ).

† White cigarettes represents manufactured cigarettes.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.



**Table 4.3(cont):** Percentage of adults ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristic	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette			Other smoked tobacco <sup>2</sup>
			White <sup>†</sup>	Hand-rolled	Kretek	
			Percentage(95% CI)			
<b>Female</b>						
<b>Age (years)</b>						
15-24	2.7 (2.0, 3.5)	2.7 (2.0, 3.5)	0.1 (0.0, 0.4)	0.5 (0.3, 0.8)	2.3 (1.7, 3.1)	0.1 (0.0, 0.3)
25-44	0.1 (0.0, 0.7)	0.1 (0.0, 0.7)	0.0	0.0	0.1 (0.0, 0.7)	0.0
45-64	1.7 (1.1, 2.6)	1.7 (1.1, 2.6)	0.1 (0.0, 0.5)	0.3 (0.1, 1.0)	1.6 (1.0, 2.4)	0.1 (0.0, 0.6)
65+	5.8 (4.1, 8.1)	5.8 (4.1, 8.1)	0.1 (0.0, 0.5)	0.9 (0.5, 1.8)	5.2 (3.7, 7.5)	0.0
<b>Residence</b>	6.7 (4.1, 11.0)	6.7 (4.1, 11.0)	0.8 (0.1, 5.5)	1.8 (0.7, 4.3)	4.5 (2.4, 8.2)	0.5 (0.1, 3.2)
Urban	2.3 (1.4, 3.7)	2.3 (1.4, 3.7)	0.2 (0.0, 0.8)	0.2 (0.0, 0.6)	2.0 (1.2, 3.4)	0.1 (0.0, 0.5)
Rural	3.0 (2.2, 4.2)	3.0 (2.2, 4.2)	0.1 (0.0, 0.2)	0.8 (0.4, 1.5)	2.6 (1.8, 3.6)	0.1 (0.0, 0.5)
<b>Education Level</b>						
Less than primary school completed	5.8 (4.2, 8.1)	5.8 (4.2, 8.1)	0.2 (0.0, 1.7)	1.5 (0.8, 2.9)	4.6 (3.2, 6.6)	0.1 (0.0, 1.0)
Primary school completed	2.7 (1.7, 4.2)	2.7 (1.7, 4.2)	0.1 (0.0, 0.4)	0.3 (0.1, 0.8)	2.6 (1.6, 4.2)	0.1 (0.0, 1.0)
Secondary school completed	0.6 (0.2, 1.5)	0.6 (0.2, 1.5)	0.0	0.0	0.6 (0.2, 1.5)	0.0
High school completed	1.0 (0.5, 1.9)	1.0 (0.5, 1.9)	0.0	0.0	1.0 (0.5, 1.9)	0.0
College or University +	2.2 (0.9, 5.4)	2.2 (0.9, 5.4)	0.5 (0.1, 3.5)	0.5 (0.1, 3.5)	1.7 (0.6, 4.8)	0.0
<b>Occupation/Work status</b>						
Employed	1.5 (0.8, 2.7)	1.5 (0.8, 2.7)	0.1 (0.0, 0.6)	0.4 (0.2, 1.1)	1.4 (0.7, 2.5)	0.0
Self-employed	4.2 (2.9, 6.1)	4.2 (2.9, 6.1)	0.2 (0.0, 0.8)	0.7 (0.3, 1.6)	3.7 (2.5, 5.5)	0.1 (0.0, 1.0)
Students	0.0	0.0	0.0	0.0	0.0	0.0
Home makers	2.6 (1.7, 4.0)	2.6 (1.7, 4.0)	0.1 (0.0, 1.0)	0.4 (0.2, 1.0)	2.3 (1.4, 3.6)	0.1 (0.0, 0.6)
Un-employed	3.4 (1.8, 6.1)	3.4 (1.8, 6.1)	0.0	0.8 (0.2, 2.8)	2.6 (1.3, 5.1)	0.0

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

<sup>1</sup>Includes white cigarette, hand rolled and kretek cigarettes.

<sup>2</sup>Includes (pipes full of tobacco, cigars, shisha sessions, and any others ).

<sup>†</sup> White cigarettes represents manufactured cigarettes.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.4. Number of current smokers by smoked tobacco products

Table 4.4 (based on Table 4.3) presents the estimated number of overall current smokers, and separately for men and women current smokers. The overall estimated number of current smokers who smoke various tobacco products is 59.9 million persons. This indicates a very high national burden of tobacco use in Indonesia. The number of hand-rolled cigarette users (8.1 million) is higher than the number of white cigarette users (3.8 million). About 54.3 million persons smoke kreteks and nearly half a million smoke other products such as pipes, cigars, *shisha* and others.

By gender, the number of men smokers who use any smoked tobacco product is 57.6 million. The number of men smokers who use hand-rolled cigarettes (7.7 million) is higher than the number of those who use white cigarettes (3.7 million). About 53.3 million men smoke kreteks. The number of women current smokers (2.3 million) is far less (about 25 times less) than men current smokers. The number of women smokers who use hand-rolled cigarettes (0.4 million) is higher than the number of those who use white cigarettes (0.1 million). Almost 2 million women smoke kreteks.

The 25–44 years age group has the highest number of smokers among those who use any smoked tobacco product (29.2 million), white cigarettes (2.3 million) and kreteks (26.9 million). Hand-rolled cigarette users, however, show a higher prevalence in the 45–64 years age group.

The overall number of smokers living in rural areas (32.3 million) is higher than those who live in urban areas (27.6 million). Hand-rolled cigarettes and kretek smoking are more common in rural areas (6.1 million and 29.6 million, respectively) than urban areas (2.1 million and 24.7 million, respectively). However, the number of white cigarette users in urban areas (2.4 million) is higher than those in rural areas (1.3 million).

The lesser educated category (less than primary, primary and secondary) accounts for 43.3 million smokers, which is much more than those from the higher educated category (high school, college or university educated; 16.6 million). Among kretek smokers also, 39.1 million smokers belong to the less educated category (less than primary, primary and secondary) while 15.2 million belong to the more educated category (high school, college or university educated). The same pattern obtains for hand-rolled cigarette smoking; however, it is the reverse for white cigarette smokers.

**Table 4.4:** Number of adults ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristic	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette			Other smoked tobacco <sup>2</sup>
			White <sup>†</sup>	Hand-rolled	Kretek	
Number in thousands						
Overall	59,884.5	59,874.0	3,779.7	8,147.3	54,295.2	506.2
Age (years)						
15-24	10,828.0	10,828.0	772.7	465.2	10,464.2	169.2
25-44	29,210.0	29,210.0	2,292.7	2,879.2	26,873.9	197.3
45-64	16,060.1	16,060.1	484.9	3,202.3	14,345.1	62.9
65+	3,786.4	3,775.9	229.4	1,600.6	2,612.0	76.8
Residence						
Urban	27,593.9	27,593.9	2,447.0	2,054.7	24,711.3	283.2
Rural	32,290.5	32,280.0	1,332.7	6,092.6	29,583.8	223.0
Education Level						
Less than primary school completed	14,349.6	14,349.6	359.6	4,072.0	12,279.4	100.8
Primary school completed	17,433.4	17,422.9	628.7	2,808.1	15,907.0	64.8
Secondary school completed	11,498.3	11,498.3	758.1	572.7	10,884.2	47.8
High school completed	13,347.9	13,347.9	1,478.0	541.4	12,214.8	171.4
College or University +	3,255.2	3,255.2	555.3	153.2	3,009.7	121.5
Occupation/Work status						
Employed	22,900.3	22,889.8	1,481.4	2,746.1	21,033.5	161.7
Self-employed	29,710.6	29,710.6	1,706.9	4,663.3	26,682.3	205.1
Students	1,990.2	1,990.2	203.4	37.5	1,913.3	40.2
Home makers	995.0	995.0	52.4	159.3	864.8	31.5
Un-employed	4,249.0	4,249.0	335.6	541.1	3,761.8	67.7

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

<sup>1</sup> Includes white cigarette, hand rolled and kretek cigarettes.

<sup>2</sup> Includes (pipes full of tobacco, cigars, shisha sessions, and any others ).

<sup>†</sup> White cigarettes represents manufactured cigarettes.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.4 (cont):** Number of adult males ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette			
			White <sup>†</sup>	Hand-rolled	Kretek	Other smoked tobacco <sup>2</sup>
Number in thousands						
Male						
Age (years)						
15-24	57,586.8	57,576.3	3,677.5	7,731.1	52,302.9	444.5
25-44	10,808.4	10,808.4	772.7	465.2	10,444.5	169.2
45-64	28,552.9	28,552.9	2,265.9	2,769.7	26,260.4	165.8
65+	14,891.9	14,891.9	461.9	3,014.4	13,285.9	62.9
	3,333.6	3,323.1	177.1	1,481.7	2,312.2	46.5
Residence						
Urban	26,588.4	26,588.4	2,367.8	1,978.7	23,834.2	251.7
Rural	30,998.4	30,987.9	1,309.7	5,752.4	28,468.8	192.8
Education Level						
Less than primary school completed	13,088.4	13,088.4	307.2	3,752.9	11,286.8	70.5
Primary school completed	16,791.6	16,781.2	605.7	2,737.8	15,275.2	33.3
Secondary school completed	11,396.0	11,396.0	758.1	572.7	10,781.9	47.8
High school completed	13,174.1	13,174.1	1,478.0	541.4	12,041.0	171.4
College or University +	3,136.6	3,136.6	528.5	126.3	2,917.9	121.5
Occupation/Work status						
Employed	22,658.1	22,647.6	1,468.4	2,676.9	20,809.7	161.7
Self-employed	28,825.0	28,825.0	1,670.1	4,507.4	25,904.8	174.9
Students	1,990.2	1,990.2	203.4	37.5	1,913.3	40.2
Home makers	--	--	--	--	--	--
Un-employed	4,041.6	4,041.6	335.6	492.4	3,603.2	67.7

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

<sup>1</sup>Includes white cigarette, hand rolled and kretek cigarettes.

<sup>2</sup>Includes (pipes full of tobacco, cigars, shisha sessions, and any others ).

<sup>†</sup> White cigarettes represents manufactured cigarettes.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.4 (cont):** Number of adult females ≥15 years old who are current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristic	Any smoked tobacco product	Any cigarette <sup>1</sup>	Type of Cigarette			Other smoked tobacco <sup>2</sup>
			White <sup>†</sup>	Hand-rolled	Kretek	
Number in thousands						
Female	2,297.7	2,297.7	102.2	416.2	1,992.2	61.7
Age (years)						
15-24	19.7	19.7	0.0	0.0	19.7	0.0
25-44	657.1	657.1	26.9	109.4	613.6	31.5
45-64	1,168.2	1,168.2	23.0	187.9	1,059.2	0.0
65+	452.7	452.7	52.4	118.9	299.8	30.3
Residence						
Urban	1,005.6	1,005.6	79.2	76.0	877.2	31.5
Rural	1,292.1	1,292.1	23.0	340.2	1,115.1	30.3
Education Level						
Less than primary school completed	1,261.2	1,261.2	52.4	319.1	992.7	30.3
Primary school completed	641.8	641.8	23.0	70.3	631.7	31.5
Secondary school completed	102.3	102.3	0.0	0.0	102.3	0.0
High school completed	173.8	173.8	0.0	0.0	173.8	0.0
College or University +	118.6	118.6	26.9	26.9	91.8	0.0
Occupation/Work status						
Employed	242.3	242.3	13.0	69.2	223.8	0.0
Self-employed	885.6	885.6	36.9	156.0	777.5	30.3
Students	0.0	0.0	0.0	0.0	0.0	0.0
Home makers	962.5	962.5	52.4	142.4	832.3	31.5
Un-employed	207.3	207.3	0.0	48.7	158.6	0.0

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

<sup>1</sup> Includes white cigarette, hand rolled and kretek cigarettes.

<sup>2</sup> Includes (pipes full of tobacco, cigars, shisha sessions, and any others).

† White cigarettes represents manufactured cigarettes.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

## 4.5. Frequency of tobacco use

### 4.5.1. Frequency of cigarette smoking

Table 4.5 presents the frequency of cigarette smoking as three standard categories – “daily cigarette smokers”, “occasional cigarette smokers” and “non-smokers”. The percentages of adults aged 15 years and over who are daily smokers, occasional smokers, and non-smokers are 29.2%, 5.6%, and 65.2%, respectively. The percentage of men and women daily smokers is 56.7% and 1.8%, respectively. The percentage of men occasional smokers (10.3%) is almost 13 times that of women occasional smokers (0.8%). The percentage of women non-smokers (97.3%) is almost thrice that of men non-smokers (33.0%). Daily smoking is higher in all the age groups of 25 years and above as compared to the 15–24 years age group; however, occasional smoking shows no change for different age groups.

Among men, by age group, the highest percentage of daily smokers can be found in the 25–44 years and 45–64 years age groups (63.8% and 62.8%, respectively). The 15–24 years age group has the highest percentage of occasional smokers (12.9%) while the remaining three age groups have similar percentages of occasional smokers (about 9%).

Among men, by residence, the percentage of daily smokers in rural areas (62.3%) is higher than that in urban areas (51.2%). The distribution of occasional smokers is similar (10.4% urban, 10.2% rural). The percentage of men non-smokers living in urban areas (38.4%) is higher than among those living in rural areas (27.5%).

Among men, the percentage of daily smokers is high for those with less than primary school (71.1%) and primary school (62.8%) education. There is no specific distribution pattern for occasional smokers based on educational level. The group with university education has the highest percentage of non-smokers (50.2%) followed by high school (41.3%), secondary school (37.7%), primary school education (26.0%) and less than primary school education (19.0%).

By occupation, self-employed men have the highest prevalence of daily smoking (65.5%), followed by those who were employed (60.1%).

**Table 4.5:** Percentage distribution of adults ≥15 years old, by tobacco smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	29.2 (27.6, 30.9)	5.6 (4.8, 6.4)	65.2 (63.6, 66.8)	100
<b>Age (years)</b>				
15-24	19.6 (17.1, 22.3)	6.5 (5.0, 8.3)	73.9 (71.1, 76.6)	100
25-44	32.6 (30.6, 34.8)	5.0 (4.2, 6.0)	62.4 (60.3, 64.4)	100
45-64	33.5 (30.5, 36.6)	5.9 (4.8, 7.2)	60.6 (57.6, 63.6)	100
65+	26.1 (22.7, 29.9)	5.0 (3.5, 7.2)	68.9 (65.0, 72.5)	100
<b>Residence</b>				
Urban	26.3 (24.3, 28.4)	5.7 (4.8, 6.8)	68.1 (65.9, 70.2)	100
Rural	32.2 (29.7, 34.8)	5.5 (4.4, 6.8)	62.3 (59.9, 64.7)	100
<b>Education Level</b>				
Less than primary school completed	32.7 (29.5, 36.0)	5.3 (4.1, 6.8)	62.0 (58.9, 65.1)	
Primary school completed	31.3 (29.0, 33.7)	5.9 (4.8, 7.1)	62.8 (60.4, 65.1)	100
Secondary school completed	26.3 (23.8, 29.0)	5.6 (4.2, 7.3)	68.1 (65.4, 70.7)	100
High school completed	28.3 (26.0, 30.7)	5.4 (4.4, 6.7)	66.3 (63.7, 68.7)	100
College or University +	21.9 (18.9, 25.4)	5.7 (3.8, 8.4)	72.4 (68.1, 76.2)	100
<b>Occupation/Work status</b>				
Employed	40.1 (37.1, 43.3)	6.6 (5.4, 8.1)	53.2 (50.3, 56.2)	100
Self-employed	43.4 (40.2, 46.7)	6.9 (5.7, 8.4)	49.7 (46.2, 53.1)	100
Students	7.5 (4.9, 11.2)	6.8 (4.5, 10.1)	85.7 (81.6, 89.1)	100
Home makers	1.7 (1.1, 2.7)	1.0 (0.5, 1.9)	97.3 (95.9, 98.2)	100
Un-employed	24.5 (20.5, 29.1)	7.0 (5.0, 9.8)	68.4 (63.8, 72.7)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5 (cont):** Percentage distribution of adults ≥15 years old, by tobacco smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Male</b>	56.7 (53.8, 59.6)	10.3 (9.0, 11.8)	33.0 (30.5, 35.6)	100
<b>Age (years)</b>				
15-24	38.9 (34.3, 43.6)	12.9 (10.0, 16.4)	48.3 (43.7, 52.9)	100
25-44	63.8 (60.4, 67.0)	9.5 (7.9, 11.4)	26.7 (23.9, 29.8)	100
45-64	62.8 (58.1, 67.2)	9.6 (7.7, 12.0)	27.6 (23.7, 31.9)	100
65+	52.2 (45.8, 58.7)	9.0 (6.0, 13.2)	38.8 (32.9, 45.1)	100
<b>Residence</b>				
Urban	51.2 (47.5, 55.0)	10.4 (8.7, 12.3)	38.4 (35.0, 41.8)	100
Rural	62.3 (57.8, 66.6)	10.2 (8.2, 12.7)	27.5 (24.0, 31.3)	100
<b>Education Level</b>				
Less than primary school completed	71.1 (65.7, 75.9)	10.0 (7.3, 13.4)	19.0 (15.1, 23.5)	100
Primary school completed	62.8 (58.9, 66.5)	11.3 (9.3, 13.6)	26.0 (22.6, 29.7)	100
Secondary school completed	51.4 (46.8, 55.9)	10.9 (8.3, 14.2)	37.7 (33.6, 42.0)	100
High school completed	49.5 (45.9, 53.2)	9.1 (7.3, 11.4)	41.3 (38.0, 44.8)	100
College or University +	39.6 (34.6, 44.8)	10.2 (6.8, 15.0)	50.2 (43.6, 56.8)	100
<b>Occupation/Work status</b>				
Employed	60.1 (55.8, 64.2)	9.7 (8.0, 11.8)	30.2 (26.9, 33.7)	100
Self-employed	65.5 (61.9, 69.0)	10.2 (8.4, 12.2)	24.3 (21.2, 27.7)	100
Students	13.2 (8.9, 19.1)	11.9 (7.9, 17.5)	74.9 (68.6, 80.4)	100
Home makers	--	--	--	--
Un-employed	43.4 (36.9, 50.1)	12.0 (8.3, 17.0)	44.6 (37.9, 51.5)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.



**Table 4.5 (cont):** Percentage distribution of adults ≥15 years old, by cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Female</b>	1.8 (1.4, 2.4)	0.8 (0.5, 1.3)	97.3 (96.5, 98.0)	100
<b>Age (years)</b>				
15-24	0.1 (0.0, 0.7)	0.0	99.9 (99.3, 100.0)	100
25-44	1.2 (0.8, 1.9)	0.5 (0.2, 1.0)	98.3 (97.4, 98.9)	100
45-64	3.7 (2.4, 5.5)	2.1 (1.3, 3.5)	94.2 (91.9, 95.9)	100
65+	5.0 (2.9, 8.4)	1.8 (0.8, 3.7)	93.3 (89.0, 95.9)	100
<b>Residence</b>				
Urban	1.4 (0.8, 2.2)	1.0 (0.5, 1.9)	97.7 (96.3, 98.6)	100
Rural	2.3 (1.6, 3.2)	0.7 (0.5, 1.2)	97.0 (95.8, 97.8)	100
<b>Education Level</b>				
Less than primary school completed	4.1 (2.7, 6.0)	1.8 (1.1, 2.7)	94.2 (91.9, 95.8)	100
Primary school completed	1.8 (1.1, 3.0)	0.8 (0.4, 1.9)	97.3 (95.8, 98.3)	100
Secondary school completed	0.5 (0.2, 1.3)	0.1 (0.0, 0.8)	99.4 (98.5, 99.8)	100
High school completed	0.4 (0.2, 1.2)	0.6 (0.3, 1.4)	99.0 (98.1, 99.5)	100
College or University +	1.6 (0.6, 4.5)	0.6 (0.1, 4.0)	97.8 (94.6, 99.1)	100
<b>Occupation/Work status</b>				
Employed	0.9 (0.5, 1.9)	0.5 (0.2, 1.3)	98.5 (97.3, 99.2)	100
Self-employed	3.2 (2.1, 4.8)	1.0 (0.6, 1.9)	95.8 (93.9, 97.1)	100
Students	0.0	0.0	100.0	100
Home makers	1.7 (1.1, 2.6)	1.0 (0.5, 1.9)	97.4 (96.0, 98.3)	100
Un-employed	2.2 (1.1, 4.4)	1.2 (0.4, 3.4)	96.6 (93.9, 98.2)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.5.2. Frequency of white cigarette smoking

Table 4.5A presents the frequency of white cigarette smoking in three standard categories – “daily smokers”, “occasional smokers” and “non-smokers”. The percentage of adults aged 15 years and above who are daily white cigarette smokers, occasional white cigarette smokers and non-smokers of white cigarettes are 1.6%, 0.6% and 97.8%, respectively. The percentage of daily white cigarette smokers is 3.1% among men and 0.1% among women. The percentage of occasional white cigarette smokers is 1.2% among men; 95.7% of men are non-smokers of white cigarettes. Among women, 98.9% are non-smokers of white cigarettes.

Among men, the prevalence of daily and occasional smoking does not differ by age or residence; however, daily smoking is more prevalent among the higher education group.

Among women, the numbers are small and hence comparison is difficult.

**Table 4.5A:** Percentage distribution of adults ≥15 years old, by white cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	White Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	Percentage (95% CI)			
<b>Overall</b>	1.6 (1.2, 2.2)	0.6 (0.4, 0.9)	97.8 (97.0, 98.4)	100
<b>Age (years)</b>				
15-24	1.2 (0.7, 2.1)	0.6 (0.3, 1.2)	98.1 (97.1, 98.8)	100
25-44	2.3 (1.6, 3.2)	0.7 (0.4, 1.1)	97.0 (95.9, 97.9)	100
45-64	0.7 (0.3, 1.4)	0.5 (0.3, 1.1)	98.8 (97.8, 99.3)	100
65+	1.4 (0.6, 3.3)	0.5 (0.1, 1.6)	98.1 (96.2, 99.1)	100
<b>Residence</b>				
Urban	2.1 (1.4, 3.1)	0.7 (0.4, 1.3)	97.2 (95.7, 98.1)	100
Rural	1.1 (0.7, 1.7)	0.5 (0.3, 0.8)	98.4 (97.7, 99.0)	100
<b>Education Level</b>				
Less than primary school completed	0.6 (0.3, 1.3)	0.3 (0.1, 0.7)	99.0 (98.3, 99.5)	
Primary school completed	0.9 (0.5, 1.7)	0.4 (0.2, 0.8)	98.7 (97.8, 99.2)	100
Secondary school completed	1.7 (1.1, 2.8)	0.4 (0.2, 0.9)	97.9 (96.7, 98.7)	100
High school completed	2.8 (2.1, 3.9)	0.9 (0.5, 1.7)	96.3 (94.9, 97.3)	100
College or University +	2.7 (1.4, 5.0)	2.1 (0.9, 4.5)	95.3 (91.9, 97.3)	100
<b>Occupation/Work status</b>				
Employed	2.2 (1.4, 3.3)	0.9 (0.5, 1.5)	97.0 (95.6, 97.9)	100
Self-employed	2.1 (1.4, 3.1)	0.8 (0.5, 1.3)	97.1 (95.9, 98.0)	100
Students	0.8 (0.3, 2.1)	0.6 (0.2, 2.0)	98.5 (97.0, 99.3)	100
Home makers	0.1 (0.0, 1.0)	0.0	99.9 (99.0, 100.0)	100
Un-employed	1.8 (0.9, 3.6)	0.7 (0.2, 2.2)	97.5 (95.5, 98.6)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5A (cont):** Percentage distribution of adults ≥15 years old, by white cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	White Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Male</b>	3.1 (2.2, 4.2)	1.2 (0.8, 1.8)	95.7 (94.2, 96.8)	100
<b>Age (years)</b>				
15-24	2.5 (1.5, 4.1)	1.2 (0.6, 2.4)	96.3 (94.3, 97.6)	100
25-44	4.4 (3.2, 6.2)	1.4 (0.8, 2.3)	94.2 (92.0, 95.8)	100
45-64	1.3 (0.6, 2.8)	0.9 (0.4, 2.0)	97.8 (95.9, 98.8)	100
65+	2.2 (0.9, 5.2)	1.0 (0.3, 3.5)	96.7 (93.6, 98.4)	100
<b>Residence</b>				
Urban	4.0 (2.7, 6.0)	1.5 (0.8, 2.6)	94.5 (91.8, 96.4)	100
Rural	2.1 (1.3, 3.4)	0.9 (0.5, 1.5)	96.9 (95.4, 98.0)	100
<b>Education Level</b>				
Less than primary school completed	1.2 (0.6, 2.3)	0.7 (0.3, 1.7)	98.1 (96.7, 98.9)	
Primary school completed	1.9 (1.0, 3.6)	0.8 (0.4, 1.7)	97.3 (95.5, 98.4)	100
Secondary school completed	3.4 (2.1, 5.6)	0.7 (0.3, 1.8)	95.9 (93.4, 97.4)	100
High school completed	5.0 (3.6, 6.8)	1.6 (0.9, 3.0)	93.4 (91.0, 95.2)	100
College or University +	4.5 (2.3, 8.7)	3.9 (1.8, 8.1)	91.6 (85.7, 95.2)	100
<b>Occupation/Work status</b>				
Employed	3.3 (2.2, 4.9)	1.3 (0.7, 2.3)	95.5 (93.4, 96.9)	100
Self-employed	3.2 (2.2, 4.7)	1.2 (0.7, 2.0)	95.6 (93.8, 96.9)	100
Students	1.4 (0.6, 3.6)	1.1 (0.4, 3.5)	97.4 (94.8, 98.8)	100
Home makers	--	--	--	--
Un-employed	3.4 (1.7, 6.5)	1.2 (0.4, 4.0)	95.4 (91.8, 97.5)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5A (cont):** Percentage distribution of adults ≥15 years old, by white cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	White Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Female</b>	0.1 (0.0, 0.4)	0.0 (0.0, 0.1)	99.9 (99.6, 100.0)	100
<b>Age (years)</b>				
15-24	0.0	0.0	100.0	100
25-44	0.1 (0.0, 0.5)	0.0	99.9 (99.5, 100.0)	100
45-64	0.0	0.1 (0.0, 0.5)	99.9 (99.5, 100.0)	100
65+	0.8 (0.1, 5.5)	0.0	99.2 (94.5, 99.9)	100
<b>Residence</b>				
Urban	0.2 (0.0, 0.8)	0.0	99.8 (99.2, 100.0)	100
Rural	0.0	0.1 (0.0, 0.2)	99.9 (99.8, 100.0)	100
<b>Education Level</b>				
Less than primary school completed	0.2 (0.0, 1.7)	0.0	99.8 (98.3, 100.0)	
Primary school completed	0.0	0.1 (0.0, 0.4)	99.9 (99.6, 100.0)	100
Secondary school completed	0.0	0.0	100.0	100
High school completed	0.0	0.0	100.0	100
College or University +	0.5 (0.1, 3.5)	0.0	99.5 (96.5, 99.9)	100
<b>Occupation/Work status</b>				
Employed	0.0	0.1 (0.0, 0.6)	99.9 (99.4, 100.0)	100
Self-employed	0.1 (0.0, 0.9)	0.0 (0.0, 0.4)	99.8 (99.2, 100.0)	100
Students	0.0	0.0	100.0	100
Home makers	0.1 (0.0, 1.0)	0.0	99.9 (99.0, 100.0)	100
Un-employed	0.0	0.0	100.0	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.5.3. Frequency of hand-rolled cigarette smoking

Table 4.5B presents the frequency of hand-rolled cigarette smoking by three standard categories – “daily smokers”, “occasional smokers” and “non-smokers”. The percentage of adults aged 15 years and above who are daily hand-rolled cigarette smokers, occasional hand-rolled cigarette smokers and non-smokers of hand-rolled cigarettes is 3.8%, 1.0% and 95.3%, respectively. The percentage of daily hand-rolled cigarette smokers among men is 7.2% and among women it is 0.4%. The percentage of occasional hand-rolled cigarette smokers among men is 1.8%; 91.0% of men are non-smokers of hand-rolled cigarettes. Among women, 0.1% identified themselves as occasional hand-rolled cigarette smokers and 99.5% are non-smokers.

Among men, the prevalence of daily hand-rolled cigarette smoking increases with age; it is higher in rural (10.7%) areas as compared to urban areas (3.7%). Daily hand-rolled cigarette smoking among men is higher among less educated people (less than primary, primary) as compared to more educated people (high school, college or university). Occasional hand-rolled cigarette smoking among men does not differ by age, residence or education.

Among women, the numbers are small and hence a comparison is difficult.

**Table 4.5B:** Percentage distribution of adults ≥15 years old, by hand-rolled cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Hand-rolled Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	Percentage (95% CI)			
<b>Overall</b>	3.8 (2.8, 5.0)	1.0 (0.7, 1.4)	95.3 (93.7, 96.4)	100
<b>Age (years)</b>				
15-24	0.8 (0.4, 1.7)	0.3 (0.1, 1.1)	98.9 (97.8, 99.4)	100
25-44	2.8 (1.8, 4.2)	0.9 (0.5, 1.8)	96.3 (94.4, 97.6)	100
45-64	6.6 (4.9, 8.8)	1.3 (0.9, 2.0)	92.1 (89.7, 94.0)	100
65+	10.8 (8.0, 14.5)	2.3 (1.4, 3.9)	86.8 (83.1, 89.8)	100
<b>Residence</b>				
Urban	1.9 (1.1, 3.2)	0.5 (0.3, 1.0)	97.6 (96.1, 98.5)	100
Rural	5.7 (4.0, 8.0)	1.4 (0.9, 2.3)	92.9 (90.0, 95.0)	100
<b>Education Level</b>				
Less than primary school completed	9.3 (6.9, 12.4)	1.5 (1.0, 2.3)	89.2 (85.9, 91.8)	
Primary school completed	4.7 (3.3, 6.7)	1.3 (0.8, 2.1)	94.0 (91.7, 95.7)	100
Secondary school completed	1.0 (0.6, 1.9)	0.6 (0.2, 1.5)	98.4 (97.3, 99.1)	100
High school completed	1.0 (0.6, 1.7)	0.4 (0.1, 1.4)	98.6 (97.6, 99.2)	100
College or University +	0.1 (0.0, 1.0)	1.2 (0.4, 3.0)	98.7 (96.7, 99.5)	100
<b>Occupation/Work status</b>				
Employed	4.6 (2.9, 7.2)	1.0 (0.6, 1.8)	94.4 (91.5, 96.3)	100
Self-employed	6.3 (4.6, 8.5)	1.6 (1.1, 2.4)	92.1 (89.5, 94.1)	100
Students	0.1 (0.0, 1.0)	0.1 (0.0, 1.0)	99.7 (98.0, 100.0)	100
Home makers	0.3 (0.1, 1.0)	0.1 (0.0, 0.4)	99.6 (99.0, 99.8)	100
Un-employed	2.8 (1.8, 4.5)	1.2 (0.4, 3.3)	96.0 (93.6, 97.5)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5B (cont):** Percentage distribution of adults ≥15 years old, by hand-rolled cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Hand-rolled Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
		Percentage (95% CI)		
<b>Male</b>	7.2 (5.3, 9.6)	1.8 (1.2, 2.7)	91.0 (88.0, 93.3)	100
<b>Age (years)</b>				
15-24	1.6 (0.7, 3.3)	0.7 (0.2, 2.1)	97.8 (95.6, 98.9)	100
25-44	5.3 (3.5, 8.0)	1.8 (0.9, 3.5)	92.9 (89.3, 95.4)	100
45-64	12.2 (9.1, 16.3)	2.4 (1.6, 3.7)	85.3 (81.0, 88.8)	100
65+	22.9 (16.8, 30.4)	4.3 (2.3, 7.9)	72.8 (65.3, 79.2)	100
<b>Residence</b>				
Urban	3.7 (2.1, 6.3)	0.9 (0.5, 1.9)	95.4 (92.5, 97.2)	100
Rural	10.7 (7.5, 15.2)	2.7 (1.6, 4.4)	86.5 (81.1, 90.6)	100
<b>Education Level</b>				
Less than primary school completed	20.0 (14.5, 26.9)	3.2 (2.0, 5.1)	76.8 (69.6, 82.7)	
Primary school completed	9.5 (6.6, 13.4)	2.6 (1.6, 4.2)	87.9 (83.4, 91.3)	100
Secondary school completed	2.0 (1.1, 3.7)	1.1 (0.4, 2.9)	96.9 (94.7, 98.2)	100
High school completed	1.8 (1.0, 3.0)	0.7 (0.2, 2.4)	97.6 (95.8, 98.6)	100
College or University +	0.3 (0.0, 1.9)	1.7 (0.6, 5.0)	98.0 (94.5, 99.3)	100
<b>Occupation/Work status</b>				
Employed	6.8 (4.3, 10.7)	1.4 (0.8, 2.6)	91.8 (87.6, 94.6)	100
Self-employed	9.4 (6.9, 12.7)	2.4 (1.6, 3.6)	88.2 (84.2, 91.2)	100
Students	0.2 (0.0, 1.7)	0.2 (0.0, 1.7)	99.5 (96.6, 99.9)	100
Home makers	--	--	--	--
Un-employed	4.6 (2.7, 7.8)	2.1 (0.7, 6.1)	93.2 (88.8, 96.0)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5B (cont):** Percentage distribution of adults ≥15 years old, by hand-rolled cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Hand-rolled Cigarette Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
		Percentage (95% CI)		
<b>Female</b>	0.4 (0.2, 0.7)	0.1 (0.1, 0.3)	99.5 (99.2, 99.7)	100
<b>Age (years)</b>				
15-24	0.0	0.0	100.0	100
25-44	0.2 (0.0, 0.9)	0.1 (0.0, 0.5)	99.7 (99.0, 99.9)	100
45-64	0.8 (0.4, 1.6)	0.2 (0.0, 0.5)	99.1 (98.2, 99.5)	100
65+	1.1 (0.4, 2.8)	0.7 (0.2, 2.1)	98.2 (95.7, 99.3)	100
<b>Residence</b>				
Urban	0.1 (0.0, 0.4)	0.1 (0.0, 0.4)	99.8 (99.4, 100.0)	100
Rural	0.6 (0.3, 1.3)	0.1 (0.1, 0.4)	99.2 (98.5, 99.6)	100
<b>Education Level</b>				
Less than primary school completed	1.3 (0.6, 2.5)	0.2 (0.1, 0.6)	98.5 (97.1, 99.2)	100
Primary school completed	0.2 (0.0, 0.7)	0.1 (0.0, 0.5)	99.7 (99.2, 99.9)	100
Secondary school completed	0.0	0.0	100.0	100
High school completed	0.0	0.0	100.0	100
College or University +	0.0	0.5 (0.1, 3.5)	99.5 (96.5, 99.9)	100
<b>Occupation/Work status</b>				
Employed	0.2 (0.1, 1.0)	0.2 (0.1, 0.6)	99.6 (98.9, 99.8)	100
Self-employed	0.6 (0.3, 1.4)	0.1 (0.0, 0.9)	99.3 (98.4, 99.7)	100
Students	0.0	0.0	100.0	100
Home makers	0.3 (0.1, 0.9)	0.1 (0.0, 0.4)	99.6 (99.0, 99.8)	100
Un-employed	0.7 (0.2, 2.9)	0.1 (0.0, 0.7)	99.2 (97.2, 99.8)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.5.4. Frequency of kretek smoking

Table 4.5C presents the frequency of kretek smoking by three standard categories – “daily smokers”, “occasional smokers” and “non-smokers”. The percentage of adults aged 15 years and above who are daily kretek smokers, occasional kretek smokers and non-smokers of kretek is 25.9%, 5.7% and 68.5%, respectively. The percentage of daily kretek smokers among men is 50.3% and among women it is 1.5%. The percentage of occasional kretek smokers among men is 10.6% and 39.1% of men are non-smokers of kretek. Among women, 0.8% identified themselves as occasional kretek smokers and 97.7% are non-smokers of kretek.

Among men, the 25–44 years age group has the highest percentage of daily kretek smokers (57.9%), followed by the 45–64 years age group (53.9%). Among men, the percentage of daily kretek smokers in rural areas (55.0%) is higher than that in urban areas (45.6%). Daily kretek smoking is more prevalent among less educated people (less than primary, primary) as compared to people with higher educational levels (high school and college or university educated). Among men, occasional kretek smoking does not differ by age, residence or education.

Among women, the numbers are small and therefore a comparison is difficult.

**Table 4.5C:** Percentage distribution of adults ≥15 years old, by kretek cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Kretek Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	Percentage (95% CI)			
<b>Overall</b>	25.9 (24.2, 27.6)	5.7 (4.9, 6.6)	68.5 (66.7, 70.2)	100
<b>Age (years)</b>				
15-24	18.9 (16.5, 21.5)	6.3 (4.9, 8.1)	74.8 (72.0, 77.5)	100
25-44	29.6 (27.7, 31.7)	5.0 (4.1, 6.0)	65.4 (63.3, 67.4)	100
45-64	28.8 (25.9, 31.9)	6.4 (5.2, 7.8)	64.8 (61.8, 67.8)	100
65+	15.8 (12.8, 19.3)	5.7 (4.1, 7.8)	78.5 (74.7, 81.9)	100
<b>Residence</b>				
Urban	23.3 (21.3, 25.5)	5.3 (4.3, 6.5)	71.4 (68.9, 73.8)	100
Rural	28.4 (25.8, 31.2)	6.1 (4.9, 7.5)	65.5 (63.0, 67.9)	100
<b>Education Level</b>				
Less than primary school completed	26.2 (22.7, 30.1)	6.3 (4.9, 7.9)	67.5 (63.8, 71.0)	
Primary school completed	28.1 (25.5, 30.8)	5.9 (4.8, 7.2)	66.1 (63.3, 68.7)	100
Secondary school completed	24.8 (22.2, 27.5)	5.4 (4.1, 7.2)	69.8 (66.9, 72.5)	100
High school completed	25.6 (23.3, 28.1)	5.2 (4.2, 6.5)	69.1 (66.4, 71.7)	100
College or University +	20.2 (17.2, 23.6)	5.4 (3.6, 7.8)	74.4 (70.2, 78.2)	100
<b>Occupation/Work status</b>				
Employed	36.4 (33.4, 39.5)	6.5 (5.3, 8.0)	57.1 (54.1, 60.0)	100
Self-employed	37.7 (34.5, 41.1)	7.5 (6.1, 9.1)	54.8 (51.3, 58.3)	100
Students	7.0 (4.6, 10.6)	6.7 (4.5, 10.0)	86.3 (82.0, 89.6)	100
Home makers	1.4 (0.9, 2.2)	0.9 (0.4, 1.8)	97.6 (96.3, 98.5)	100
Un-employed	21.3 (17.4, 25.9)	6.6 (4.6, 9.4)	72.1 (67.4, 76.3)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.5C (cont):** Percentage distribution of adults ≥15 years old, by kretek cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	Percentage (95% CI)			
<b>Male</b>	50.3 (47.2, 53.4)	10.6 (9.1, 12.2)	39.1 (36.2, 42.1)	100
<b>Age (years)</b>				
15-24	37.4 (33.0, 42.1)	12.5 (9.8, 15.9)	50.0 (45.3, 54.8)	100
25-44	57.9 (54.4, 61.4)	9.4 (7.8, 11.4)	32.6 (29.4, 36.0)	100
45-64	53.9 (49.0, 58.7)	10.7 (8.6, 13.3)	35.4 (31.2, 39.9)	100
65+	31.5 (25.6, 38.0)	11.0 (7.8, 15.3)	57.5 (50.9, 63.9)	100
<b>Residence</b>				
Urban	45.6 (41.7, 49.6)	9.6 (7.9, 11.7)	44.7 (40.7, 48.9)	100
Rural	55.0 (50.2, 59.7)	11.6 (9.3, 14.3)	33.4 (29.5, 37.6)	100
<b>Education Level</b>				
Less than primary school completed	57.3 (50.8, 63.5)	12.6 (9.6, 16.3)	30.1 (24.9, 36.0)	100
Primary school completed	56.1 (51.3, 60.7)	11.3 (9.1, 13.8)	32.7 (28.2, 37.4)	100
Secondary school completed	48.3 (43.8, 52.8)	10.6 (8.0, 13.9)	41.1 (36.7, 45.6)	100
High school completed	44.9 (41.1, 48.7)	8.8 (7.0, 10.9)	46.4 (42.6, 50.2)	100
College or University +	36.8 (31.8, 42.0)	9.5 (6.4, 14.0)	53.7 (46.9, 60.3)	100
<b>Occupation/Work status</b>				
Employed	54.5 (50.0, 58.8)	9.6 (7.9, 11.7)	35.9 (32.2, 39.8)	100
Self-employed	57.0 (53.0, 60.9)	11.0 (9.1, 13.4)	32.0 (28.2, 36.0)	100
Students	12.3 (8.2, 18.0)	11.8 (7.9, 17.2)	75.9 (69.5, 81.3)	100
Home makers	--	--	--	--
Un-employed	38.1 (31.6, 45.0)	11.3 (7.7, 16.4)	50.6 (43.6, 57.5)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.



**Table 4.5C (cont):** Percentage distribution of adults ≥15 years old, by kretek cigarette smoking frequency, gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking Frequency			Total
	Daily	Occasional <sup>1</sup>	Non-smoker	
	<i>Percentage (95% CI)</i>			
<b>Female</b>	1.5 (1.1, 2.1)	0.8 (0.5, 1.3)	97.7 (96.9, 98.3)	100
<b>Age (years)</b>				
15-24	0.1 (0.0, 0.7)	0.0	99.9 (99.3, 100.0)	100
25-44	1.1 (0.7, 1.7)	0.5 (0.2, 1.0)	98.4 (97.6, 99.0)	100
45-64	3.3 (2.2, 5.0)	2.0 (1.1, 3.3)	94.8 (92.5, 96.3)	100
65+	3.1 (1.6, 5.9)	1.4 (0.6, 3.3)	95.5 (91.8, 97.6)	100
<b>Residence</b>				
Urban	1.1 (0.6, 1.9)	0.9 (0.4, 1.9)	98.0 (96.6, 98.8)	100
Rural	1.9 (1.3, 2.8)	0.6 (0.4, 1.1)	97.4 (96.4, 98.2)	100
<b>Education Level</b>				
Less than primary school completed	3.0 (2.0, 4.7)	1.5 (0.9, 2.5)	95.4 (93.4, 96.8)	100
Primary school completed	1.8 (1.1, 3.0)	0.8 (0.3, 1.8)	97.4 (95.8, 98.4)	100
Secondary school completed	0.5 (0.2, 1.3)	0.1 (0.0, 0.8)	99.4 (98.5, 99.8)	100
High school completed	0.4 (0.2, 1.2)	0.6 (0.3, 1.4)	99.0 (98.1, 99.5)	100
College or University +	1.1 (0.3, 3.9)	0.6 (0.1, 4.0)	98.3 (95.2, 99.4)	100
<b>Occupation/Work status</b>				
Employed	0.9 (0.5, 1.9)	0.4 (0.1, 1.3)	98.6 (97.5, 99.3)	100
Self-employed	2.7 (1.7, 4.2)	1.0 (0.5, 1.8)	96.3 (94.5, 97.5)	100
Students	0.0	0.0	100.0	100
Home makers	1.4 (0.9, 2.2)	0.9 (0.4, 1.9)	97.7 (96.4, 98.6)	100
Un-employed	1.5 (0.7, 3.4)	1.1 (0.3, 3.4)	97.4 (94.9, 98.7)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

## 4.6. Average number of any cigarette smoked per day

Table 4.6 gives the average number and percentage distribution of any type of cigarette smoked per day among daily smokers. The overall figure is 12.8 sticks per day. About 34% of daily smokers smoke 10–14 sticks per day, and only 6.3% smoke 25 or more sticks per day.

For men, the overall average is 13.0 sticks per day and for women it is 8.1. Among men smokers, the highest proportion smoke 10–14 sticks (34.7%), while among women smokers it is 5–9 sticks (36.6%). There are no women smokers who smoke 25 or more sticks per day, as against 6.5% among men smokers.

The overall average numbers of cigarettes smoked per day is similar for all age groups, ranging between 11.4 and 13.2 sticks. In the adolescent age group (15–24 years), the highest proportion of average cigarettes smoked per day (26.8%) is 15–24 sticks per day.

The average number of cigarettes smoked per day in rural areas is 13.3 as against 12.3 sticks in urban areas. The highest prevalence (34.7%) in both urban and rural areas is 10–14 sticks per day and the lowest (4.4%) is 25 or more sticks per day.

Based on the educational level, those with college or university-level education smoke the most every day (13.7 sticks). Among them, 46.2% smoke 15–24 sticks per day. The highest average number of cigarettes smoked daily for all other educational levels is 10–14 sticks.

By occupation, the highest average number of cigarettes smoked per day is among those who are self-employed (13.5 sticks) and the lowest average number is smoked by home-makers (7.6 sticks). More than half of the smokers in the home-maker group (58.7%) smoke 5–9 cigarettes per day and none smoke 25 or more per day. The self-employed group has the highest percentage of smokers who smoke 25 or more cigarettes daily (8.2%).

#### **4.6.1. Average number and distribution of white cigarettes smoked per day**

Table 4.6A shows the daily average number and proportion of white cigarettes smoked by daily white cigarette smokers by gender and selected demographic characteristics. Overall, on average, white cigarette smokers smoke 14.7 sticks per day, of whom 50.1% smoke 15–24 sticks per day and 5.2% smoke 25 or more sticks per day. Men white cigarette smokers smoke 15.0 sticks per day; about half of them (51.6%) smoke 15–24 sticks per day and 5.1% smoke less than 5 sticks per day. A larger proportion smoke white cigarettes daily in urban areas (15 sticks) than in rural areas (14.1 sticks). Both urban and rural white cigarette smokers comprise the largest proportion in the group of daily smokers; an average of 15–24 sticks per day. The least proportion of average number of cigarettes smoked among the urban population is less than 5 sticks per day and among the rural population it is more than 25 sticks per day.

#### **4.6.2. Average number and distribution of hand-rolled cigarettes smoked per day**

Table 4.6B gives the daily average number and proportion of hand-rolled cigarettes smoked by gender and selected demographic characteristics. Overall, hand-rolled cigarettes smokers smoke 11.8 sticks per day; 18.4% smoke less than 5 sticks per day, 27.5% smoke 5–9 sticks per day, 27.2% smoke 10–14 sticks per day, 17.1% smoke 15–24 sticks per day and 9.8% smoke 25 or more sticks per day. Men hand-rolled cigarette smokers smoke 12.1 sticks per day, with a similar distribution pattern as the overall figures. Overall, more hand-rolled cigarettes are smoked in rural areas (12 sticks per day) than in urban areas (11.4 sticks per day). The largest proportion of average number of hand-rolled cigarettes smoked among the urban population is 10–14 sticks per day and that among the rural population is 5–9 sticks per day.

#### **4.6.3. Average number and distribution of kretek cigarettes smoked per day**

Table 4.6C gives the average number and distribution of kretek cigarettes smoked by daily smokers by gender and selected demographic characteristics. The overall number of kretek cigarettes smoked per day among daily smokers is 11.8 sticks. Overall, 36.2% of daily smokers of kretek cigarettes smoke 10–14 cigarettes per day; 16.1% smoke less than 5 cigarettes per day, 19.3% smoke 5–9 cigarettes per day, 24.8% smoke 15–24 cigarettes per day and 3.6% smoke 25 or more cigarettes per day.

The number of kretek cigarettes smoked is 11.9 per day for men and 7.7 per day for women. The pattern of distribution of kretek cigarettes smoked per day among men kretek smokers is similar to that in the overall population. However, among women kretek smokers, 36.5% smoke less than 5 sticks per day, 32.9% smoke 5–9 sticks per day, 18.8% smoke 10–14 sticks per day, 11.8% smoke 15–24 sticks per day and none smoke 25 or more cigarettes per day.

Overall, those in the age group of 25–44 years smoke the most average number of kretek cigarettes per day (12.1 sticks), followed by the 45–64 years age group (11.8 sticks), 15–24 years age group (10.9 sticks) and the 65+ years age group (10.4 sticks).

Overall, kretek smokers in rural areas smoke more (12 sticks per day) than those in urban areas (11.5 sticks per day). The distribution of kretek cigarettes smoked by both urban and rural groups is the maximum in the 10–14 sticks per day category and the minimum is in the 25 or more sticks per day category.

Based on the educational level, the most kretek cigarettes smoked is by the college or university+ group (12.6 sticks per day). The second highest is by the high school graduate group (12 sticks per day), followed by primary school graduates (11.8 sticks per day), secondary school graduates (11.5 sticks per day) and less than primary school

completed (11.5 sticks per day). While the largest number of kretek cigarettes smoked in the college or university+ group is 15–24 sticks per day (39.2%), that in the all other groups is 10–14 sticks per day. The smallest proportion of kretek cigarette smokers in all educational groups smoked 25 or more sticks per day.

Based on occupation, the most kretek cigarettes smoked overall is among the self-employed (12.2 sticks) followed by the employed group (11.7 sticks per day), students (10.6 sticks per day), unemployed (10.3 sticks per day) and home-makers (7.3 sticks per day). Among all groups, the smallest proportion smoke 25 or more sticks per day. While 4.4% of self-employed kretek smokers, 3.1% of employed and 2.6% of unemployed smokers smoke 25 or more sticks per day, there are no students and home-makers in this group.

**Table 4.6:** Average number and percentage distribution of cigarettes smoked per day among daily cigarette smokers  $\geq 15$  years old, by gender and selected demographic characteristics – GATS Indonesia, 2011.

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>					Total
		<5	5-9	10-14	15-24	$\geq 25$	
<b>Overall</b>	Mean (95% CI)			Percentage(95% CI)			
<b>Gender</b>	12.8 (12.2, 13.5)	13.2 (10.5, 16.5)	19.6 (17.0, 22.3)	34.2 (30.6, 38.0)	26.8 (23.6, 30.2)	6.3 (4.9, 8.0)	100
Male	13.0 (12.3, 13.6)	12.6 (9.9, 15.9)	19.0 (16.5, 21.8)	34.7 (31.0, 38.5)	27.2 (24.0, 30.8)	6.5 (5.1, 8.2)	100
Female	8.1 (6.5, 9.6)	31.1 (20.7, 43.7)	36.6 (25.5, 49.3)	20.0 (11.3, 32.9)	12.3 (6.2, 23.1)	0.0	100
<b>Age (years)</b>							
15-24	12.0 (10.3, 13.6)	19.6 (14.2, 26.5)	24.9 (19.0, 31.8)	23.3 (17.6, 30.0)	26.8 (21.3, 33.1)	5.4 (2.8, 10.3)	100
25-44	13.2 (12.5, 14.0)	10.5 (8.0, 13.8)	18.0 (14.9, 21.5)	36.3 (31.5, 41.3)	28.8 (24.9, 33.2)	6.4 (4.6, 8.7)	100
45-64	12.9 (11.9, 13.9)	13.0 (9.7, 17.4)	18.9 (15.5, 22.8)	36.9 (32.2, 41.8)	24.3 (19.9, 29.3)	6.9 (4.7, 10.0)	100
65+	11.4 (10.0, 12.8)	18.4 (12.4, 26.4)	21.4 (15.8, 28.3)	34.5 (27.7, 42.1)	20.9 (14.3, 29.6)	4.8 (2.3, 9.7)	100
<b>Residence</b>							
Urban	12.3 (11.5, 13.0)	14.0 (10.3, 18.9)	21.0 (17.5, 25.0)	34.7 (30.2, 39.4)	25.8 (22.0, 30.1)	4.4 (3.0, 6.6)	100
Rural	13.3 (12.3, 14.3)	12.5 (8.9, 17.2)	18.3 (14.9, 22.4)	33.9 (28.5, 39.6)	27.5 (22.8, 32.8)	7.8 (5.8, 10.4)	100
<b>Education Level</b>							
Less than primary school completed	12.9 (11.9, 13.9)	14.8 (11.3, 19.3)	18.3 (14.9, 22.3)	33.2 (28.7, 37.9)	26.8 (22.0, 32.2)	6.8 (4.4, 10.4)	100
Primary school completed	13.0 (11.9, 14.2)	13.4 (9.2, 19.1)	19.2 (15.0, 24.4)	38.1 (32.3, 44.3)	21.9 (17.8, 26.8)	7.3 (5.1, 10.4)	100
Secondary school completed	12.2 (11.2, 13.2)	12.9 (8.9, 18.3)	23.6 (18.8, 29.2)	32.0 (26.4, 38.1)	25.9 (21.1, 31.4)	5.6 (3.5, 8.7)	100
High school completed	12.9 (12.0, 13.7)	13.3 (9.7, 18.0)	18.2 (14.2, 23.2)	33.5 (28.2, 39.2)	29.3 (24.0, 35.2)	5.7 (3.8, 8.5)	100
College or University +	13.7 (12.6, 14.7)	4.7 (1.8, 11.5)	17.8 (11.9, 25.7)	28.8 (21.3, 37.7)	46.2 (36.7, 55.9)	2.5 (0.6, 9.2)	100
<b>Occupation/Work status</b>							
Employed	12.6 (11.8, 13.3)	11.3 (8.1, 15.4)	21.4 (17.6, 25.7)	34.9 (30.8, 39.3)	27.8 (24.2, 31.7)	4.6 (3.4, 6.4)	100
Self-employed	13.5 (12.5, 14.4)	13.3 (9.7, 18.0)	15.9 (13.0, 19.2)	35.5 (30.4, 41.1)	27.1 (22.7, 32.1)	8.2 (6.1, 10.8)	100
Students	11.3 (9.3, 13.2)	14.8 (6.1, 31.6)	25.1 (13.0, 42.9)	29.6 (12.6, 55.1)	27.2 (14.0, 46.2)	3.4 (0.5, 19.5)	100
Home makers	7.6 (6.2, 9.0)	18.1 (9.3, 32.2)	58.7 (42.5, 73.2)	17.7 (8.7, 32.7)	5.5 (1.4, 19.7)	0.0	100
Un-employed	11.0 (9.1, 13.0)	21.7 (15.1, 30.1)	28.2 (20.3, 37.7)	24.4 (17.0, 33.8)	22.3 (14.3, 33.1)	3.4 (1.3, 8.8)	100

<sup>1</sup> Among daily cigarette smokers. Cigarettes include white cigarette, hand-rolled and kretek cigarettes.

**Table 4.6A:** Average number and percentage distribution of white cigarettes smoked per day among daily white cigarette smokers ≥15 years old, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Average number of white cigarettes smoked per day <sup>1</sup> Mean (95% CI)	Distribution of number of white cigarettes smoked on average per day <sup>1</sup>					Total
		<5	5-9	10-14 Percentage(95% CI)	15-24	≥25	
<b>Overall</b>	14.7 (12.9, 16.5)	6.0 (3.1, 11.2)	23.7 (16.1, 33.4)	15.1 (9.1, 24.0)	50.1 (39.3, 60.8)	5.2 (2.0, 12.7)	100
<b>Gender</b>							
Male	15.0 (13.1, 16.8)	5.1 (2.6, 9.9)	22.4 (14.8, 32.5)	15.5 (9.4, 24.6)	51.6 (40.8, 62.3)	5.4 (2.1, 13.3)	100
Female	--	--	--	--	--	--	--
<b>Age (years)</b>							
15-24	--	--	--	--	--	--	--
25-44	15.1 (12.7, 17.5)	7.1 (3.1, 15.3)	22.5 (14.0, 34.1)	12.5 (5.8, 25.1)	51.3 (38.7, 63.7)	6.6 (2.4, 16.7)	100
45-64	--	--	--	--	--	--	--
65+	--	--	--	--	--	--	--
<b>Residence</b>							
Urban	15.0 (12.7, 17.3)	6.0 (2.9, 11.7)	24.1 (16.2, 34.2)	18.4 (10.3, 30.5)	44.7 (34.3, 55.6)	6.9 (2.5, 17.5)	100
Rural	14.1 (11.5, 16.7)	6.0 (1.5, 20.9)	22.9 (9.3, 46.2)	8.6 (2.8, 23.2)	60.7 (37.4, 79.9)	1.9 (0.3, 12.8)	100
<b>Education Level</b>							
Less than primary school completed	--	--	--	--	--	--	--
Primary school completed	--	--	--	--	--	--	--
Secondary school completed	--	--	--	--	--	--	--
High school completed	16.4 (13.0, 19.8)	6.9 (2.6, 17.1)	23.4 (13.0, 38.4)	6.7 (2.3, 18.2)	54.2 (40.2, 67.5)	8.9 (2.8, 24.8)	100
College or University +	--	--	--	--	--	--	--
<b>Occupation/Work status</b>							
Employed	13.4 (11.1, 15.8)	7.2 (2.5, 19.2)	26.5 (16.1, 40.5)	23.9 (13.2, 39.3)	36.0 (24.2, 49.8)	6.3 (1.5, 22.9)	100
Self-employed	17.1 (14.2, 20.0)	5.0 (1.5, 15.8)	16.2 (7.7, 30.9)	5.0 (1.2, 18.1)	67.9 (51.0, 81.1)	6.0 (2.0, 16.5)	100
Students	--	--	--	--	--	--	--
Home makers	--	--	--	--	--	--	--
Un-employed	--	--	--	--	--	--	--

<sup>1</sup> Among daily white cigarette smokers.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.6B:** Average number and percentage distribution of hand-rolled cigarettes smoked per day among daily hand-rolled cigarette smokers ≥15 years old, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Distribution of number of hand-rolled cigarettes smoked on average per day <sup>1</sup>					
	Average number of hand-rolled cigarettes	<5	5-9	10-14	15-24	≥25
	Mean (95% CI)	Percentage (95% CI)				
<b>Overall</b>	11.8 (9.6, 14.0)	18.4 (12.9, 25.5)	27.5 (20.7, 35.6)	27.2 (22.4, 32.5)	17.1 (12.4, 23.1)	9.8 (5.2, 17.8)
<b>Gender</b>						
Male	12.1 (9.8, 14.4)	16.8 (11.3, 24.2)	28.1 (20.9, 36.6)	27.5 (22.4, 33.2)	17.4 (12.6, 23.6)	10.3 (5.4, 18.7)
Female	--	--	--	--	--	--
<b>Age (years)</b>						
15-24	--	--	--	--	--	--
25-44	12.6 (9.2, 16.0)	14.9 (8.0, 25.9)	31.7 (20.0, 46.2)	25.8 (18.2, 35.4)	15.9 (8.9, 27.0)	11.7 (5.2, 24.4)
45-64	11.9 (9.5, 14.2)	19.6 (12.4, 29.5)	23.5 (15.3, 34.4)	27.9 (21.6, 35.3)	16.8 (11.4, 24.2)	12.2 (6.2, 22.6)
65+	10.0 (8.0, 12.0)	19.1 (10.6, 31.8)	25.7 (17.5, 36.0)	32.9 (24.0, 43.2)	20.7 (11.9, 33.6)	1.6 (0.4, 6.1)
<b>Residence</b>						
Urban	11.4 (7.5, 15.3)	16.6 (8.1, 31.2)	25.5 (13.0, 43.7)	32.8 (24.9, 41.8)	20.0 (13.1, 29.4)	5.1 (0.7, 28.3)
Rural	12.0 (9.3, 14.6)	19.0 (12.7, 27.4)	28.2 (20.5, 37.5)	25.3 (19.7, 31.8)	16.2 (10.7, 23.8)	11.3 (5.7, 21.2)
<b>Education Level</b>						
Less than primary school completed	11.4 (9.6, 13.1)	17.0 (11.4, 24.4)	24.9 (17.8, 33.7)	29.9 (24.0, 36.5)	20.3 (14.5, 27.7)	8.0 (3.2, 18.6)
Primary school completed	13.6 (9.6, 17.7)	16.9 (10.1, 27.1)	28.8 (16.1, 46.1)	25.8 (17.6, 36.1)	13.2 (7.6, 22.0)	15.3 (7.8, 27.7)
Secondary school completed	--	--	--	--	--	--
High school completed	--	--	--	--	--	--
College or University +	--	--	--	--	--	--
<b>Occupation/Work status</b>						
Employed	10.5 (8.6, 12.4)	13.7 (6.6, 26.0)	37.2 (25.1, 51.0)	31.2 (21.2, 43.4)	13.1 (7.8, 21.4)	4.8 (2.0, 11.0)
Self-employed	13.0 (9.8, 16.2)	20.1 (14.0, 28.0)	22.0 (15.5, 30.3)	24.4 (19.0, 30.8)	19.4 (12.9, 28.0)	14.2 (7.2, 25.9)
Students	--	--	--	--	--	--
Home makers	--	--	--	--	--	--
Un-employed	--	--	--	--	--	--

<sup>1</sup> Among daily hand-rolled cigarette smokers.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 4.6C:** Average number and percentage distribution of kretek cigarettes smoked per day among daily kretek smokers  $\geq 15$  years old, by gender and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Average number of kretek cigarettes smoked per day <sup>1</sup>	Distribution of number of kretek cigarettes smoked on average per day <sup>1</sup>					Total
	Mean (95% CI)	<5	5-9	10-14	15-24	≥25	
Overall	11.8 (11.1, 12.5)	16.1 (12.9, 19.8)	19.3 (16.8, 22.0)	36.2 (32.4, 40.3)	24.8 (21.4, 28.6)	3.6 (2.6, 5.0)	100
Gender							
Male	11.9 (11.2, 12.6)	15.4 (12.3, 19.2)	18.9 (16.4, 21.6)	36.8 (32.8, 40.9)	25.2 (21.8, 29.1)	3.7 (2.6, 5.1)	100
Female	7.7 (5.8, 9.5)	36.5 (24.6, 50.4)	32.9 (22.7, 44.9)	18.8 (9.5, 33.7)	11.8 (5.4, 24.1)	0.0	100
Age (years)							
15-24	10.9 (9.6, 12.3)	21.2 (15.3, 28.5)	25.3 (19.3, 32.4)	24.7 (19.1, 31.4)	26.0 (20.0, 33.2)	2.8 (1.3, 5.8)	100
25-44	12.1 (11.4, 12.9)	13.4 (10.3, 17.2)	18.1 (15.1, 21.6)	38.4 (33.5, 43.6)	26.2 (22.2, 30.5)	3.9 (2.5, 6.0)	100
45-64	11.8 (10.8, 12.8)	16.1 (12.0, 21.3)	18.4 (14.8, 22.7)	39.3 (34.0, 45.0)	22.3 (17.4, 28.0)	3.8 (2.3, 6.2)	100
65+	10.4 (8.9, 12.0)	26.4 (17.9, 37.2)	14.0 (8.1, 23.0)	37.5 (28.1, 48.0)	20.0 (11.6, 32.3)	2.1 (0.5, 8.2)	100
Residence							
Urban	11.5 (10.7, 12.4)	15.3 (11.4, 20.1)	22.2 (18.7, 26.2)	36.5 (31.9, 41.4)	22.7 (18.7, 27.3)	3.2 (2.0, 5.3)	100
Rural	12.0 (11.0, 13.0)	16.7 (12.1, 22.6)	16.9 (13.7, 20.6)	36.0 (30.1, 42.3)	26.6 (21.5, 32.4)	3.9 (2.5, 5.9)	100
Education Level							
Less than primary school completed	11.5 (10.4, 12.6)	21.6 (16.6, 27.7)	16.7 (13.4, 20.8)	34.6 (29.3, 40.2)	23.5 (18.3, 29.6)	3.6 (2.0, 6.1)	100
Primary school completed	11.8 (10.7, 12.9)	16.2 (11.3, 22.6)	18.3 (14.3, 23.0)	40.5 (34.4, 46.9)	21.2 (16.6, 26.8)	3.8 (2.3, 6.2)	100
Secondary school completed	11.5 (10.6, 12.5)	14.1 (9.8, 19.9)	24.0 (19.1, 29.7)	33.4 (27.6, 39.7)	24.6 (19.7, 30.3)	3.9 (2.3, 6.6)	100
High school completed	12.0 (11.2, 12.9)	13.9 (10.2, 18.6)	18.8 (14.7, 23.7)	36.5 (30.9, 42.5)	27.7 (22.2, 33.9)	3.2 (1.9, 5.4)	100
College or University +	12.6 (11.4, 13.9)	8.9 (4.0, 18.6)	20.1 (13.4, 29.0)	29.0 (20.7, 39.0)	39.2 (29.7, 49.6)	2.7 (0.7, 9.9)	100
Occupation/Work status							
Employed	11.7 (10.8, 12.5)	15.6 (11.8, 20.4)	20.4 (17.1, 24.3)	36.4 (31.9, 41.2)	24.5 (20.7, 28.6)	3.1 (2.0, 4.7)	100
Self-employed	12.2 (11.3, 13.1)	14.9 (10.8, 20.1)	16.3 (13.3, 19.9)	38.2 (32.8, 44.0)	26.2 (21.3, 31.8)	4.4 (3.0, 6.2)	100
Students	10.6 (8.7, 12.5)	15.4 (6.2, 33.1)	25.3 (12.7, 44.0)	30.6 (12.3, 57.9)	28.8 (14.6, 48.8)	0.0	100
Home makers	7.3 (5.6, 8.9)	24.2 (11.3, 44.5)	54.2 (35.5, 71.8)	18.2 (8.2, 35.6)	3.4 (0.5, 21.7)	0.0	100
Un-employed	10.3 (8.2, 12.4)	26.5 (18.9, 35.8)	27.0 (18.7, 37.4)	24.3 (17.1, 33.4)	19.6 (11.9, 30.5)	2.6 (0.8, 8.2)	100

<sup>1</sup> Among daily kretek cigarette smokers.

#### 4.7. Age at smoking initiation

Table 4.7 shows the distribution of ever daily smokers by the age at initiation of daily smoking among ever daily smokers in the 20–34 years age group based on gender, place of residence, educational level and occupation status. Overall, and among men, the average age at daily smoking initiation is 17.6 years. There are 39.9% smokers who start smoking daily at the age of 17–19 years, 24.6% at the age of 20+ years, 23.0% at the age of 15–16 years and 12.5% among those less than 15 years old. Thus, about 75% smokers start smoking before the age of 20 years.

There is no significant difference in the average age at daily smoking initiation in the urban and rural population (17.7 and 17.5 years, respectively). Average age at daily smoking initiation is higher in people with college and university education as compared to all other educational categories. The average age at initiation of daily smoking does not differ significantly among the employed, self-employed and unemployed categories.

There are no significant differences in age at daily smoking initiation by residence or by occupation in any of the age groups— <15, 15–16, 17–19 and 20+ years. However, in the age groups <15 and 17–19 years, there are significant differences between the lowest and highest levels of education. In the age groups of 15–16 and 20+ years, no difference is noted by educational category (Table 4.7).



**Table 4.7:** Percentage distribution of ever daily smokers 20-34 years old by age at daily smoking initiation, gender and residence – GATS Indonesia, 2011.

Demographic Characteristics	Average age of daily smoking		Age at Daily Smoking Initiation (years) <sup>1</sup>								Total
			<15		15-16		17-19		20+		
			Percentage (95% CI)								
Overall	17.6	(17.3, 17.9)	12.5	(8.9, 17.2)	23.0	(19.3, 27.1)	39.9	(35.5, 44.5)	24.6	(21.0, 28.7)	100
Gender											
Male	17.6	(17.3, 17.9)	12.5	(8.8, 17.3)	23.0	(19.3, 27.1)	40.3	(35.8, 44.9)	24.3	(20.6, 28.4)	100
Female	--	--	--	--	--	--	--	--	--	--	--
Residence											
Urban	17.7	(17.3, 18.1)	11.6	(8.5, 15.6)	20.7	(15.8, 26.6)	42.6	(36.3, 49.2)	25.1	(20.1, 30.9)	100
Rural	17.5	(17.0, 18.0)	13.3	(7.7, 22.0)	25.0	(19.8, 31.0)	37.6	(31.5, 44.1)	24.2	(19.2, 30.1)	100
Education Level											
Less than primary school completed	16.9	(15.3, 17.5)	19.2	(12.3, 28.6)	32.5	(22.9, 43.9)	23.6	(16.6, 32.5)	24.7	(16.8, 34.7)	100
Primary school completed	17.2	(16.6, 17.7)	18.1	(11.6, 27.0)	22.6	(16.2, 30.7)	36.6	(28.7, 45.2)	22.8	(16.6, 30.5)	100
Secondary school completed	17.5	(16.9, 18.0)	12.1	(6.7, 20.8)	27.0	(20.1, 35.1)	36.6	(28.9, 45.0)	24.4	(18.4, 31.5)	100
High school completed	18.0	(17.6, 18.4)	7.6	(4.9, 11.6)	18.6	(13.0, 25.8)	50.1	(42.1, 58.1)	23.7	(18.5, 30.0)	100
College & University +	19.5	(18.6, 20.4)	1.0	(0.1, 7.0)	11.5	(5.1, 24.0)	51.5	(38.6, 64.2)	36.0	(22.8, 51.7)	100
Occupation/Work status											
Employed	17.7	(17.2, 18.2)	12.9	(7.0, 22.7)	21.1	(16.3, 26.8)	41.2	(35.1, 47.5)	24.9	(20.3, 30.1)	100
Self-employed	17.7	(17.2, 18.1)	12.5	(8.8, 17.4)	23.3	(18.2, 29.4)	37.6	(31.4, 44.1)	26.6	(20.7, 33.5)	100
Students	--	--	--	--	--	--	--	--	--	--	--
Home makers	--	--	--	--	--	--	--	--	--	--	--
Un-employed	16.4	(15.8, 17.0)	14.7	(6.6, 29.6)	36.2	(21.5, 54.0)	41.3	(26.5, 57.8)	7.8	(2.5, 21.9)	100

Note: Smoking initiation among any daily smokers (cigarettes or any other smoked products daily).

<sup>1</sup> Among respondents 25-34 years of age who are ever daily smokers.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.8. Former daily smoking prevalence and quit ratio

Table 4.8 shows the proportion of former daily smokers among all adults, and former daily smokers among ever daily smokers (known as the quit ratio) by selected demographic characteristics. There are 3.3% current non-smokers among all adults and 9.5% smoking quitters among ever daily smokers. There are 6.0% current non-smokers among men and 0.6% among women. However, the quit ratio in men is 9% while it is 23.2% in women.

The percentage of current non-smokers and the quit ratio rises as the age increases. The percentage of former daily smokers is 0.4% in the 15–24 years age group, 2.6% in the 25–44 years age group, 5.6% in the 45–64 years age group and 9.8% in the 65+ years age group. In addition, the quit ratio is 2% in the age group of 15–24 years, 6.9% in those 25–44 years, 13.4% in those 45–64 years, and 25.1% in those 65+ years. There are more current non-smokers in urban areas than that in rural areas (3.7% and 2.9%, respectively). The quit ratio is also higher in urban areas than that in rural areas (11.4% and 7.9%, respectively).

The largest proportion of current non-smokers and quit ratio is among those in the college and university groups (5.3% and 18.2%, respectively). The smallest proportion of current non-smokers and quit ratio is among those in the secondary school completed group (1.5% and 5%, respectively). The proportion of current non-smokers and quit ratio tends to decrease as the education level rises to the group of secondary school completed, and then increases and peaks at the highest education level.

The largest proportion of current non-smokers is in the unemployed group (6.6%), followed by the self-employed (4.5%), employed (3.8%), home-makers (0.7%) and students groups (0.1%). The quit ratio for daily smoking is 28.5% among home-makers, 19.2% among the unemployed, 8.9% among the self-employed, 8% among the employed and only 0.8% among students.

**Table 4.8:** Percentage of all adults and ever daily smokers  $\geq 15$  years old who are former daily smokers, by selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Former Daily Smokers <sup>1</sup> (Among All Adults)	Former Daily Smokers <sup>1</sup> (Among Ever Daily Smokers) <sup>2</sup>
	Percentage (95% CI)	
<b>Overall</b>	3.3 (2.8, 3.9)	9.5 (8.0, 11.3)
<b>Gender</b>		
Male	6.0 (5.0, 7.2)	9.0 (7.5, 10.7)
Female	0.6 (0.4, 1.0)	23.2 (14.6, 34.7)
<b>Age (years)</b>		
15-24	0.4 (0.1, 1.3)	2.0 (0.7, 6.0)
25-44	2.6 (2.0, 3.3)	6.9 (5.4, 8.9)
45-64	5.6 (4.4, 7.1)	13.4 (10.5, 17.0)
65+	9.8 (7.6, 12.6)	25.1 (20.1, 30.8)
<b>Residence</b>		
Urban	3.7 (2.9, 4.6)	11.4 (8.9, 14.3)
Rural	2.9 (2.3, 3.7)	7.9 (6.1, 10.2)
<b>Education Level</b>		
Less than primary school completed	4.1 (3.1, 5.4)	10.6 (8.0, 13.9)
Primary school completed	3.2 (2.3, 4.3)	8.8 (6.5, 11.8)
Secondary school completed	1.5 (0.9, 2.3)	5.0 (3.2, 7.6)
High school completed	3.7 (2.9, 4.8)	10.7 (8.2, 13.7)
College or University +	5.3 (3.6, 7.8)	18.2 (12.6, 25.6)
<b>Occupation/Work status</b>		
Employed	3.8 (2.8, 5.0)	8.0 (6.0, 10.7)
Self-employed	4.5 (3.6, 5.6)	8.9 (7.1, 11.1)
Students	0.1 (0.0, 0.5)	0.8 (0.1, 5.6)
Home makers	0.7 (0.3, 1.5)	28.5 (14.2, 49.1)
Un-employed	6.6 (4.7, 9.3)	19.2 (13.8, 26.1)

Note: Smoking initiation among any daily smokers (cigarettes, kreteks or any other smoked products daily).

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

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

#### 4.9. Time since quitting smoking

Table 4.9 reports on the time since former daily smokers (current non-smokers) have quit smoking, in four groups (<1 year, 1–5 years, 5–10 years and 10 years or more). Overall, 46.8% of current non-smokers quit smoking more than 10 years ago, 17.6% for 5–10 years, 25.5% for 1–5 years and 10% for less than a year. A similar pattern is seen in men and women current non-smokers; however, only 4.4% of women current non-smokers have quit less than a year ago as compared to 10.6% of men.

The percentage of current non-smokers who quit more than 10 years ago is 57.5% in the age group of 45–64 years, 48.5% in the age group of 65+ years and 37.8% in the age group of 25–44 years. By residence, 47.0% quit smoking for over 10 years in urban areas and 46.6% in rural areas. By educational level, the largest percentage of those who had quit smoking for more than 10 years ago is at the college and university level (53.5%); the percentage in the high school completed group is 47.6%, secondary school completed is 46.8%, primary school completed is 47.7% and less than primary school completed is 42.4%. There are 47.8% current non-smokers who have quit smoking for more than 10 years among the self-employed, 47.2% among the employed and 47.3% among the unemployed groups.

**Table 4.9:** Percentage distribution of former daily smokers ≥15 years old, by time since quitting smoking and selected demographic characteristics – GATS Indonesia, 2011.

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>	10.0 (6.6, 14.9)	25.5 (20.4, 31.4)	17.6 (12.9, 23.7)	46.8 (40.1, 53.6)	100
<b>Gender</b>					
Male	10.6 (6.9, 16.0)	24.5 (19.2, 30.6)	17.6 (12.5, 24.2)	47.3 (40.6, 54.1)	100
Female	4.4 (0.6, 25.4)	35.9 (17.1, 60.3)	17.7 (8.1, 34.2)	42.0 (22.9, 63.8)	100
<b>Age (years)</b>					
15-24	--	--	--	--	--
25-44	6.0 (2.7, 12.9)	35.0 (25.1, 46.4)	21.2 (14.1, 30.5)	37.8 (28.2, 48.4)	100
45-64	11.2 (6.1, 19.7)	17.3 (11.2, 25.8)	14.0 (8.4, 22.2)	57.5 (48.3, 66.3)	100
65+	11.2 (4.6, 24.9)	18.6 (10.7, 30.4)	21.7 (12.1, 35.8)	48.5 (34.6, 62.6)	100
<b>Residence</b>					
Urban	13.3 (8.1, 20.9)	20.8 (15.3, 27.7)	18.9 (13.0, 26.6)	47.0 (38.4, 55.9)	100
Rural	6.1 (3.1, 11.7)	31.3 (22.6, 41.5)	16.1 (9.1, 26.8)	46.6 (36.3, 57.1)	100
<b>Education Level</b>					
Less than primary school completed	9.4 (4.6, 18.5)	30.1 (18.1, 45.6)	18.1 (11.6, 27.1)	42.4 (30.3, 55.4)	100
Primary school completed	12.1 (5.2, 25.5)	24.5 (15.3, 36.8)	15.8 (7.9, 29.2)	47.7 (34.1, 61.6)	100
Secondary school completed	2.8 (0.4, 18.5)	37.3 (20.9, 57.2)	13.1 (5.3, 29.1)	46.8 (29.8, 64.5)	100
High school completed	9.5 (3.5, 23.0)	22.2 (13.4, 34.5)	20.8 (11.9, 33.7)	47.6 (34.7, 60.8)	100
College or University +	14.1 (5.4, 32.3)	15.1 (6.8, 30.3)	17.2 (6.9, 37.0)	53.5 (31.8, 74.0)	100
<b>Occupation/Work status</b>					
Employed	10.5 (5.5, 19.1)	21.5 (13.2, 33.0)	20.7 (12.2, 33.0)	47.2 (34.2, 60.6)	100
Self-employed	10.7 (5.3, 20.4)	25.5 (17.2, 36.1)	15.9 (10.7, 23.1)	47.8 (38.2, 57.7)	100
Students	--	--	--	--	--
Home makers	--	--	--	--	--
Un-employed	10.2 (3.7, 25.3)	22.7 (11.9, 39.0)	19.8 (9.5, 36.8)	47.3 (32.5, 62.5)	100

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

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

#### 4.10. Type of current tobacco use

Table 4.10 gives the type of tobacco used by current tobacco users (which includes both daily and occasional tobacco users), by selected demographic characteristics. Overall, the percentage of current tobacco users is 36.1%. Among these, 95.1% use smoked tobacco only, 2.6% use smokeless tobacco only and 2.3% use both smoked and smokeless tobacco. While there are 67.4% tobacco users among men, there are only 4.5% tobacco users among women. The majority of men tobacco users use smoked tobacco only (97.7%), the percentage among women is 56.1%. Among men tobacco users, the proportion of smokeless tobacco users is only 0.1% while that among women tobacco users is 40.2%. The proportion of those who used both smoked and smokeless tobacco among men tobacco users is 2.2% and among women tobacco users it is 3.7% (Figure 4.3).

The proportion of current tobacco users in the 15–24 years age group is 26.6%. This increases to 38.3% in the 25–44 years age group and to 40.7% in the 45–64 years age group. It reduces slightly to 38.2% in the 65+ years age group. The proportion of smoked-only tobacco users tends to decline as the age increases (97.1% in the 15–24 years age group, 96.6% in the 25–44 years age group, 95.4% in the 45–64 years age group and 79.5% in the 65+ years age group). In contrast, there is an increasing trend as the age increases in smokeless-only tobacco use (0.7% in the 15–24 years age group, 0.9% in the 25–44 years age group, 2.7% in the 45–64 years age group and 17.4% in the 65+ years age group).

There are more current tobacco users in rural areas (39.1%) than in urban areas (33%). There are 96.2% smoked-only tobacco users in urban areas and 94.3% in rural areas. The percentage of smokeless-only tobacco users in rural areas is 3.1% while in urban areas it is 2%.

The proportion of current tobacco users decreases with higher educational levels. It is 41.2% among less than primary school completed, 37.8% among primary school graduates, 33% among secondary school graduates, 34.3% among high school completed and reaches the lowest proportion of 28.0% among college and university graduates.

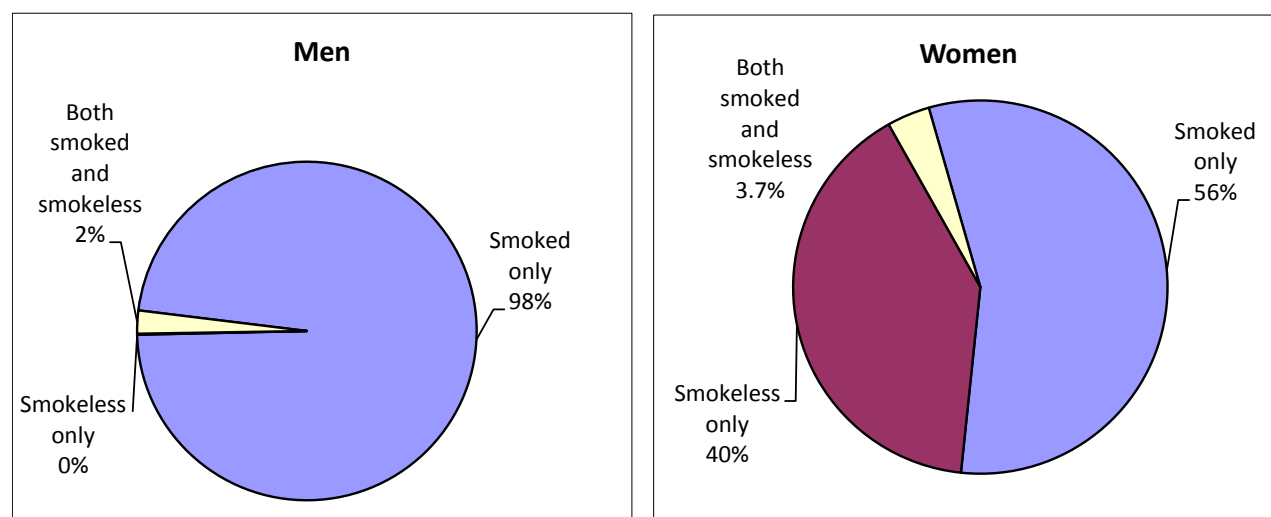
By occupation, the largest proportion of current tobacco users is among the self-employed group (51.4%), followed by the employed group (47.6%), unemployed group (34.5%), students (14.6%) and home-makers (4.3%). Even though the home-makers group had the smallest percentage of smoked-only tobacco users (62.4%), it has the largest percentage of smokeless-only tobacco users (36.9%).

**Table 4.10:** Percentage distribution of current tobacco users ≥15 years old, by tobacco use pattern and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Current Tobacco Users <sup>1</sup>	Type of Current Tobacco Use			Total
		Smoked only	Smokeless only	Both smoked and smokeless	
		Percentage (95% CI )			
<b>Overall</b>	36.1 (34.4, 37.8)	95.1 (93.9, 96.1)	2.6 (1.9, 3.5)	2.3 (1.6, 3.2)	100
<b>Gender</b>					
Male	67.4 (64.8, 69.9)	97.7 (96.7, 98.4)	0.1 (0.0, 0.3)	2.2 (1.5, 3.2)	100
Female	4.5 (3.6, 5.6)	56.1 (45.3, 66.3)	40.2 (30.7, 50.5)	3.7 (1.7, 7.6)	100
<b>Age (years)</b>					
15-24	26.6 (23.9, 29.6)	97.1 (94.6, 98.5)	0.7 (0.2, 2.5)	2.1 (0.9, 4.8)	100
25-44	38.3 (36.2, 40.4)	96.6 (95.0, 97.8)	0.9 (0.4, 1.9)	2.5 (1.6, 3.7)	100
45-64	40.7 (37.5, 44.0)	95.4 (93.4, 96.9)	2.7 (1.7, 4.3)	1.8 (1.0, 3.2)	100
65+	38.2 (34.1, 42.4)	79.5 (74.0, 84.1)	17.4 (13.1, 22.8)	3.1 (1.5, 6.0)	100
<b>Residence</b>					
Urban	33.0 (30.9, 35.3)	96.2 (94.5, 97.3)	2.0 (1.3, 3.1)	1.9 (1.1, 3.1)	100
Rural	39.1 (36.5, 41.7)	94.3 (92.5, 95.7)	3.1 (2.1, 4.7)	2.6 (1.7, 4.1)	100
<b>Education Level</b>					
Less than primary school completed	41.2 (38.1, 44.3)	90.0 (87.1, 92.4)	7.2 (5.2, 9.8)	2.8 (1.8, 4.5)	100
Primary school completed	37.8 (35.5, 40.2)	97.5 (96.1, 98.4)	0.7 (0.3, 1.6)	1.7 (0.9, 3.2)	100
Secondary school completed	33.0 (30.1, 36.0)	95.4 (92.7, 97.1)	2.0 (0.9, 4.1)	2.7 (1.4, 5.0)	100
High school completed	34.3 (31.9, 36.8)	97.1 (94.6, 98.5)	0.6 (0.1, 2.2)	2.3 (1.3, 4.3)	100
College or University +	28.0 (24.0, 32.3)	98.0 (93.8, 99.4)	0.7 (0.1, 4.9)	1.3 (0.3, 5.3)	100
<b>Occupation/Work status</b>					
Employed	47.6 (44.8, 50.5)	96.9 (95.5, 97.9)	0.7 (0.4, 1.3)	2.4 (1.5, 3.9)	100
Self-employed	51.4 (47.8, 54.9)	96.0 (94.4, 97.1)	1.6 (0.9, 2.8)	2.4 (1.6, 3.6)	100
Students	14.6 (11.2, 19.0)	97.4 (88.2, 99.5)	0.6 (0.1, 4.6)	1.9 (0.3, 13.1)	100
Home makers	4.3 (3.1, 5.9)	62.4 (47.2, 75.5)	36.9 (23.9, 52.1)	0.7 (0.1, 5.2)	100
Un-employed	34.5 (30.0, 39.2)	90.7 (85.4, 94.2)	7.9 (4.7, 13.0)	1.4 (0.4, 4.9)	100

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

**Figure. 4.2.** Prevalence of current tobacco use by type of product used and gender – GATS Indonesia, 2011



*Note:* All figures are in percentages.

#### 4.11. Time to first cigarette of the day

Table 4.11 shows the time to the first smoke upon waking among daily tobacco smokers by gender, age, residence, educational level and occupation. Overall, 6.8% smoke their first cigarette within 5 minutes of waking, 31.5% within 6–30 minutes, 29.4% within 31–60 minutes and 32.3% after more than 60 minutes. Among men, the proportion is 6.7% within 5 minutes, 31.9% within 6–30 minutes, 29.7% within 31–60 minutes and 31.7% beyond 60 minutes. Among women, 10.1% smoke their first cigarette within 5 minutes of waking, 20.0% within 6–30 minutes, 20.0% within 31–60 minutes and 50.0% after 60 minutes. The largest percentage of those in the 25–44 years age group had their first cigarette in 6–30 minutes (34.1%); in the other age groups the largest percentage had it in more than 60 minutes. In the urban populace, the maximum percentage (34.2%) smoke their first cigarette more than 60 minutes after waking. In the rural populace, the maximum (33.2%) smoke their first cigarette in 31–60 minutes. By educational level, the smallest proportion of those who smoke their first cigarette in less than 5 minutes of waking is the college and university group (2.4%) and the largest (7.7%) are secondary school graduates. At the other end, the largest and smallest proportion of those that have their first cigarette beyond 60 minutes of waking are primary school graduates (27.2%) and the college or university group (47.3%). Compared to other occupations, the largest proportion of smokers who smoke within 5 minutes of waking is the unemployed (9.0%) and the smallest are students (0%). The largest proportion of smokers who smoke after 60 minutes are students (58.7%) and the smallest proportion are the self-employed (29.5%).

**Table 4.11:** Percentage distribution of daily tobacco smokers ≥15 years old, by time to first smoke upon waking and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Time to first smoke				Total
	≤5 minutes	6-30 minutes	31-60 minutes	>60 minutes	
	<i>Percentage (95% CI)</i>				
<b>Overall</b>	6.8 (5.0, 9.1)	31.5 (27.1, 36.3)	29.4 (25.1, 34.1)	32.3 (27.9, 37.0)	100
<b>Gender</b>					
Male	6.7 (4.9, 9.0)	31.9 (27.5, 36.7)	29.7 (25.4, 34.4)	31.7 (27.3, 36.5)	100
Female	10.1 (4.7, 20.3)	20.0 (11.4, 32.6)	20.0 (12.7, 30.0)	50.0 (38.2, 61.8)	100
<b>Age (years)</b>					
15-24	6.8 (2.9, 15.5)	28.8 (22.3, 36.4)	25.7 (19.0, 33.6)	38.7 (31.0, 47.0)	100
25-44	6.6 (4.7, 9.2)	31.1 (26.5, 36.2)	30.3 (25.5, 35.7)	32.0 (27.3, 37.1)	100
45-64	7.0 (4.7, 10.3)	34.1 (28.2, 40.5)	30.3 (25.6, 35.5)	28.6 (23.5, 34.3)	100
65+	7.0 (3.5, 13.7)	31.0 (22.5, 41.0)	27.7 (20.3, 36.5)	34.3 (25.1, 44.8)	100
<b>Residence</b>					
Urban	7.0 (4.6, 10.5)	34.0 (27.2, 41.5)	24.8 (19.7, 30.7)	34.2 (27.7, 41.4)	100
Rural	6.6 (4.2, 10.1)	29.5 (24.1, 35.7)	33.2 (26.8, 40.2)	30.7 (24.9, 37.2)	100
<b>Education Level</b>					
Less than primary school completed	7.4 (4.9, 11.1)	30.9 (24.3, 38.4)	31.3 (26.0, 37.2)	30.3 (24.3, 37.1)	100
Primary school completed	7.6 (5.0, 11.4)	36.7 (30.3, 43.6)	28.5 (21.9, 36.2)	27.2 (21.5, 33.9)	100
Secondary school completed	7.7 (5.0, 11.6)	28.8 (22.7, 35.7)	27.9 (21.7, 35.2)	35.6 (28.3, 43.7)	100
High school completed	5.1 (2.7, 9.5)	29.1 (23.2, 35.9)	30.9 (25.5, 36.9)	34.8 (29.1, 40.9)	100
College or University +	2.4 (0.8, 7.1)	25.9 (15.8, 39.5)	24.3 (16.0, 35.1)	47.3 (36.8, 58.1)	100
<b>Occupation/Work status</b>					
Employed	5.7 (3.9, 8.2)	32.0 (26.3, 38.3)	29.1 (22.9, 36.2)	33.2 (27.4, 39.5)	100
Self-employed	7.5 (5.1, 11.0)	32.2 (26.6, 38.3)	30.8 (25.3, 36.8)	29.5 (24.2, 35.5)	100
Students	0.0	15.0 (6.6, 30.4)	26.3 (12.1, 48.0)	58.7 (39.9, 75.3)	100
Home makers	8.6 (2.0, 30.6)	21.6 (9.5, 42.0)	17.4 (7.9, 34.0)	52.3 (34.3, 69.8)	100
Un-employed	9.0 (4.6, 16.8)	31.0 (22.4, 41.1)	24.2 (17.3, 32.7)	35.9 (27.3, 45.6)	100

#### 4.12. Use of electronic cigarettes

Table 4.12 shows proportion of adults who have heard of, and use, electronic cigarettes. Overall, 10.9% adults have heard about electronic cigarettes, but only 0.3% use it.

More men than women had heard about electronic cigarettes (16.8% and 5.1%, respectively), as well as those in the 15–24 and 25–44 years age group (14.4% and 12.4%, respectively), those living in urban areas (15.3%), people with higher levels of education (secondary, high school, and college and university), those who are employed and students.

Use of electronic cigarettes is limited to men only (0.5%). It does not differ substantially by age, residence, educational level or occupation. In all cases, the use is very limited (0.5% or less).

**Table 4.12:** Percentage of adults  $\geq 15$  years old, who have heard of and currently use electronic cigarettes, GATS Indonesia, 2011.

Demographic Characteristics	Heard of electronic cigarettes	Current use of electronic cigarettes
	<i>Percentage (95% CI)</i>	
<b>Overall</b>	10.9 (9.3, 12.9)	0.3 (0.2, 0.5)
<b>Gender</b>		
Male	16.8 (14.2, 19.8)	0.5 (0.3, 1.0)
Female	5.1 (4.0, 6.5)	0.0
<b>Age (years)</b>		
15-24	14.4 (11.7, 17.5)	0.2 (0.1, 0.5)
25-44	12.4 (10.3, 14.9)	0.3 (0.2, 0.7)
45-64	7.4 (5.7, 9.6)	0.3 (0.1, 1.2)
65+	1.6 (0.6, 4.1)	0.0
<b>Residence</b>		
Urban	15.3 (12.5, 18.7)	0.4 (0.2, 0.8)
Rural	6.5 (4.9, 8.7)	0.1 (0.1, 0.3)
<b>Education Level</b>		
Less than primary school completed	1.4 (0.9, 2.1)	0.0
Primary school completed	5.7 (4.0, 8.2)	0.2 (0.1, 0.7)
Secondary school completed	11.5 (9.2, 14.3)	0.3 (0.1, 0.9)
High school completed	20.3 (17.0, 24.0)	0.4 (0.2, 0.8)
College or University +	29.4 (24.0, 35.5)	0.8 (0.4, 1.9)
<b>Occupation/Work status</b>		
Employed	16.3 (13.4, 19.6)	0.3 (0.2, 0.7)
Self-employed	8.8 (7.1, 10.8)	0.4 (0.2, 0.8)
Students	19.1 (14.3, 25.0)	0.3 (0.1, 1.4)
Home makers	4.8 (3.5, 6.6)	0.0
Un-employed	9.5 (6.9, 12.9)	0.3 (0.1, 1.3)



## 5. Cessation

Indonesia has a tobacco control policy in place to set up and support smoking cessation clinics in various health service settings and to provide counselling through national quit-lines all over the country. The Global Health Professions Students Survey (GHPSS) conducted among third-year medical and dental students in Indonesia shows that most tobacco users want to quit their tobacco habit. Most of the students wanted formal cessation training but less than one sixth of students got it. However, there are no data on cessation attitudes and cessation practices among any subnational or national sample in Indonesia.

The tobacco cessation questionnaire in the GATS conducted in Indonesia included different approaches such as counselling by any health-care provider (HCP), prescription medication, quitting without assistance and others (such as traditional medicines, switching to smokeless tobacco or any other method). Pharmacotherapeutic agents used for tobacco cessation are not available in Indonesia, hence it was not included. This chapter presents the findings on tobacco cessation practices and health-care seeking behaviour, cessation methods and the degree of interest in quitting.

### **Key findings**

- *Roughly three in ten current smokers have made quit attempts.*
- *Roughly 4 in 10 current smokers were asked if they smoked tobacco by a doctor or a health-care provider in the past 12 months.*
- *Nearly one third of current smokers received advice to quit smoking by a doctor or a health-care provider in the past 12 months.*
- *Quitting without assistance was the most common cessation method reported by current smokers who have made an attempt to quit in the past 12 months.*

### **5.1. Smoking cessation and health-care seeking behaviours**

A “quit attempt” is defined as being abstinent for less than 12 months by current and former tobacco smokers. Table 5.1 gives the proportion of adult smokers and former smokers who made a quit attempt, visited an HCP, were asked about smoking and received advice from an HCP on quitting smoking.

#### **5.1.1. Made quit attempt**

Among current and former tobacco smokers, approximately one third (30.4%) made an attempt to quit in the past 12 months. More women made quit attempts than men (44.6% and 29.8%, respectively) (Figure 5.1). Smokers who live in urban areas have a higher rate of quit attempts than those in rural areas (35.9% and 25.6%, respectively). By age group, quit attempt rates range from 25.7% (65+ years) to 36.5% (15–24 years). By educational level, smokers with college and university education have the highest percentage of quit attempts (39.4%). The rate is lowest among smokers with less than primary school education (23.7%).

#### **5.1.2. Visited health-care providers**

The percentage of smokers (including current and former tobacco smokers) who visited an HCP during the past 12 months is 30.2%. Smokers aged 65 years and above have the highest rate of HCP visits (43.9%). Smokers who live in rural areas have a slightly higher rate of HCP visits than those in urban areas (31.6% and 28.7%, respectively). By educational level, smokers with college and university education have the highest rate of HCP visits (38.6%), followed by smokers with less than primary education (37.7%). Secondary school graduates have the lowest rate of HCP visits (24.6%). By occupation, home-makers and students have the highest and lowest rates of visits to HCPs (34.2% and 19.8%, respectively) (Table 5.1).

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

Among smokers who have visited an HCP during the previous 12 months, 40.5% were asked about their history of tobacco smoking. The proportion asked about tobacco smoking by the HCP among men smokers (41.6%) is higher than that among women smokers (17.9%). By age group, the 65+ years group has the highest proportion of those who were asked by an HCP about smoking (49.1%). There is no substantial difference in this regard between the urban and rural populace (Table 5.1).

#### **5.1.4. Advised to quit by an HCP**

Approximately one third of all smokers (34.6%) ever received advice to quit smoking by an HCP. The rate of getting advice from an HCP is higher among men smokers (35.7%) than among women smokers (13.0%) (Table 5.1 and Figure 5.1).

**Table 5.1:** Percentage of current smokers ≥15 years old who made a quit attempt and received health care provider advice in the past 12 months, by selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking cessation and health care seeking behavior			
	Made quit attempt <sup>1</sup>	Visited a 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>	30.4 (26.8, 34.2)	30.2 (26.5, 34.2)	40.5 (34.6, 46.6)	34.6 (29.2, 40.5)
<b>Gender</b>				
Male	29.8 (26.2, 33.7)	30.0 (26.2, 34.0)	41.6 (35.7, 47.8)	35.7 (30.3, 41.6)
Female	44.6 (35.9, 53.7)	36.6 (27.9, 46.2)	17.9 (9.0, 32.4)	13.0 (5.6, 27.2)
<b>Age (years)</b>				
15-24	36.5 (30.3, 43.3)	21.4 (16.3, 27.7)	31.6 (21.6, 43.5)	27.2 (17.3, 39.8)
25-44	28.8 (25.0, 33.0)	29.2 (25.0, 33.7)	38.8 (30.9, 47.4)	32.3 (25.6, 39.7)
45-64	30.1 (25.3, 35.3)	34.9 (29.9, 40.3)	44.2 (37.1, 51.4)	38.5 (31.5, 46.1)
65+	25.7 (18.9, 34.0)	43.9 (35.4, 52.9)	49.1 (38.3, 59.9)	43.8 (32.4, 55.9)
<b>Residence</b>				
Urban	35.9 (30.0, 42.2)	28.7 (23.9, 34.0)	42.1 (34.4, 50.2)	35.6 (29.2, 42.6)
Rural	25.6 (21.3, 30.4)	31.6 (26.2, 37.6)	39.2 (30.9, 48.1)	33.9 (25.9, 42.9)
<b>Education Level</b>				
Less than primary school completed	23.7 (19.8, 28.1)	37.7 (32.7, 43.0)	42.3 (34.2, 51.0)	34.7 (27.3, 42.9)
Primary school completed	27.8 (23.2, 33.0)	28.2 (23.0, 34.1)	35.4 (25.0, 47.3)	29.8 (20.5, 41.2)
Secondary school completed	32.7 (27.2, 38.7)	24.6 (19.3, 30.7)	32.8 (22.7, 44.9)	30.1 (20.3, 42.2)
High school completed	36.7 (31.2, 42.5)	27.7 (22.4, 33.7)	47.7 (39.8, 55.6)	43.0 (35.2, 51.2)
College or University +	39.4 (29.8, 50.0)	38.6 (28.9, 49.3)	48.6 (36.2, 61.2)	38.3 (26.0, 52.4)
<b>Occupation/Work status</b>				
Employed	34.4 (29.4, 39.8)	28.8 (23.9, 34.2)	37.2 (31.0, 43.9)	32.6 (26.6, 39.4)
Self-employed	26.4 (22.6, 30.6)	31.7 (27.1, 36.7)	43.5 (35.0, 52.5)	36.1 (28.2, 44.9)
Students	39.7 (28.3, 52.2)	19.8 (10.8, 33.5)	--	--
Home makers	46.8 (32.7, 61.4)	34.2 (22.3, 48.5)	--	--
Un-employed	27.2 (19.7, 36.2)	31.6 (24.6, 39.5)	48.6 (33.1, 64.4)	45.0 (29.6, 61.4)

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

<sup>2</sup> HCP = Health Care 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.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

## 5.2. Cessation methods

The cessation methods used by smokers (current tobacco smokers and recent quitters for <12 months) covered in the GATS Indonesia are – counselling/advice, other prescription medications, quitting without assistance and other methods including traditional methods (herbal/medicinal plants), switching to smokeless tobacco, etc.

Table 5.2 shows that a higher proportion of smokers reported quitting on their own/quitting without assistance (70.7%); most of them had used some methods to quit smoking on their own in the past 12 months. This is followed by other methods (13.6%) and counselling (7.0%). The cessation method that was least used was prescription medication (0.4%). More urban than rural residents tried other quit methods (16.9% and 9.7%, respectively). No significant difference was noticed in the proportion of any of the cessation methods used by any other demographic characteristic, except among the college or university group, who made the maximum use of counselling/advice (17.9% as against the next highest proportion of 8.4% among high school graduates).

**Table 5.2:** Percentage of current smokers ≥15 years old who attempted to quit smoking in the past 12 months, by cessation methods used and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smoking cessation and health care seeking behavior <sup>1</sup>			
	Counseling / Advice	Other Prescription Medication	Quit without assistance	Other†
<b>Overall</b>	7.0 (4.1, 11.6)	0.4 (0.1, 2.2)	70.7 (63.9, 76.7)	13.6 (9.4, 19.3)
<b>Gender</b>				
Male	6.6 (4.0, 10.8)	0.4 (0.1, 2.4)	70.7 (63.9, 76.8)	14.1 (9.7, 20.1)
Female	13.1 (4.9, 30.6)	0.0	71.1 (54.0, 83.8)	6.6 (2.6, 15.8)
<b>Age (years)</b>				
15-24	6.4 (2.8, 14.0)	0.0	74.7 (65.0, 82.4)	11.9 (6.1, 21.7)
25-44	6.6 (3.6, 11.8)	0.6 (0.1, 4.1)	70.8 (63.2, 77.4)	15.4 (10.5, 22.0)
45-64	7.8 (4.2, 14.1)	0.6 (0.1, 2.3)	65.9 (56.6, 74.2)	9.8 (5.6, 16.8)
65+	9.1 (3.5, 21.5)	0.0	78.2 (65.1, 87.3)	24.6 (13.2, 41.2)
<b>Residence</b>				
Urban	8.5 (4.4, 15.9)	0.8 (0.1, 4.0)	65.6 (55.7, 74.3)	16.9 (10.5, 25.9)
Rural	5.2 (2.2, 11.7)	0.0	77.0 (67.8, 84.1)	9.7 (5.6, 16.5)
<b>Education Level</b>				
Less than primary school completed	6.9 (3.5, 13.3)	0.0	70.3 (61.1, 78.1)	10.5 (5.5, 19.3)
Primary school completed	3.8 (1.5, 9.4)	0.3 (0.0, 1.9)	70.7 (61.1, 78.8)	11.5 (6.9, 18.5)
Secondary school completed	5.9 (2.5, 13.1)	0.4 (0.1, 2.9)	67.8 (56.6, 77.3)	16.3 (9.8, 26.0)
High school completed	8.4 (4.3, 15.6)	1.0 (0.1, 6.9)	73.4 (64.8, 80.6)	15.0 (8.9, 24.1)
College or University +	17.0 (8.0, 32.8)	0.0	70.4 (56.5, 81.4)	17.2 (7.9, 33.5)
<b>Occupation/Work status</b>				
Employed	6.9 (3.5, 13.1)	0.4 (0.1, 3.0)	70.8 (62.0, 78.3)	12.3 (7.7, 19.3)
Self-employed	7.8 (4.6, 12.9)	0.6 (0.1, 2.4)	67.4 (58.9, 74.9)	13.9 (8.9, 21.1)
Students	3.2 (0.4, 20.6)	0.0	75.2 (50.9, 89.9)	14.4 (5.5, 32.5)
Home makers	--	--	--	--
Un-employed	6.4 (2.3, 16.5)	0.0	85.1 (72.9, 92.4)	22.7 (10.6, 42.1)

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

<sup>2</sup> HCP = health care 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.

† Others include: Traditional medicines (example herbal/medicinal plants), switching to smokeless tobacco or anything else. Note: Nicotine Replacement Therapy, such as patch or gum is not included due to translation issues of the question on NRT.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

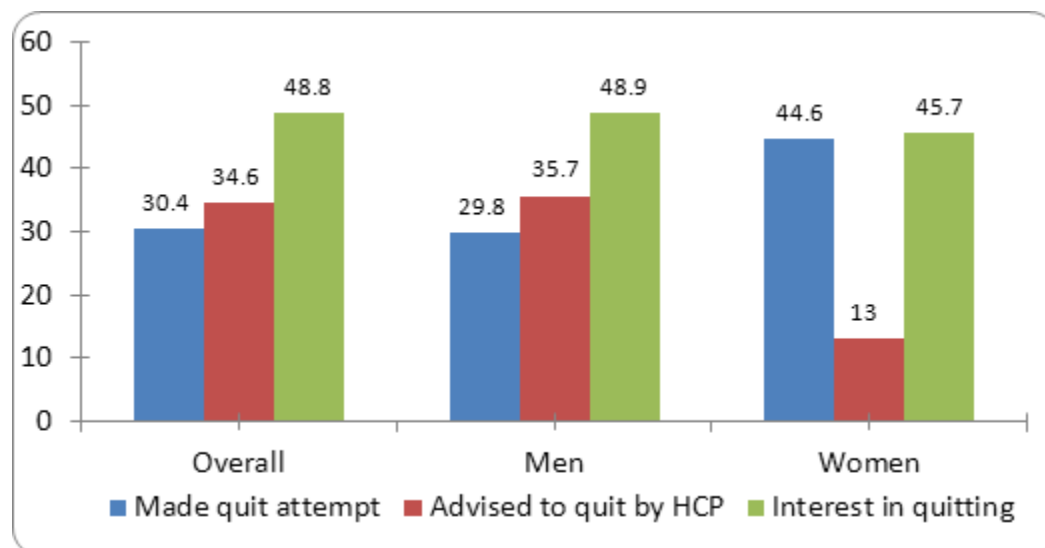
### 5.3. Interest in quitting smoking and smokeless tobacco

“Interest in quitting smoking” in GATS is defined as current tobacco smokers who are planning to quit or thinking about quitting smoking. In GATS Indonesia, the information was collected under five major categories of interest in quitting smoking – planning to quit within the next month, thinking about quitting within the next 12 months, will quit some day but not in the next 12 months, not interested in quitting, and do not know. Table 5.3 presents data on these five categories of interest in quitting smoking by various demographic characteristics.

Among all smokers, only 5.1% of current smokers reported planning to quit within the next month, and 5.4% reported planning to quit within the next 12 months. Nearly one third of smokers reported that they planned to quit, but not within the next 12 months (38.3%) or were not interested in quitting (31.3%). Nearly one fifth (19.9%) of smokers were in the “do not know” category. Within the category of planning to quit in the next month and planning to quit within the next 12 months, there is not much difference among different sociodemographic characteristics (Table 5.3). The proportion of smokers who want to quit (either quit within within the next month, or within the next year, or quit some day but not within the next one year) is almost similar for both men and women (Table 5.3 and Figure 5.1).

Among current smokers who are planning to quit within the next month, there are no significant differences by gender, age, residence and occupation. However, current smokers with a college/university level of education are more likely to quit in the next one month than all other educational levels. Among current smokers who are planning to quit within the next 12 months, there are no significant differences by various demographic characteristics. However, students showed the least inclination to quit smoking in the next 12 months. People in the 65+ group, and those with less than primary level of education, showed the least inclination to quit smoking at all (Table 5.3).

**Figure. 5.1.** Percentage of quit attempts and advice by health-care providers to quit smoking, by gender - GATS Indonesia, 2011



*Note:* All figures are in percentages.

**Table 5.3:** Percentage distribution of current smokers ≥15 years old by interest in quitting smoking and selected demographic characteristics – GATS Indonesia, 2011.

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	Not Interested in Quitting	Don't Know	
	<i>Percentage(95% CI)</i>					
<b>Overall</b>	5.1 (3.7, 7.0)	5.4 (4.1, 7.1)	38.3 (33.1, 43.8)	31.3 (26.3, 36.7)	19.9 (14.9, 26.0)	100
<b>Gender</b>						
Male	5.1 (3.7, 7.0)	5.4 (4.1, 7.2)	38.4 (33.2, 43.9)	31.5 (26.4, 37.0)	19.6 (14.7, 25.7)	100
Female	4.3 (1.9, 9.5)	5.3 (2.4, 11.6)	36.1 (24.1, 50.3)	26.7 (18.5, 36.8)	27.6 (16.5, 42.3)	100
<b>Age (years)</b>						
15-24	7.4 (4.7, 11.4)	4.4 (2.4, 7.7)	39.7 (32.9, 47.1)	25.2 (19.0, 32.6)	23.3 (16.5, 31.9)	100
25-44	4.4 (3.0, 6.4)	5.0 (3.7, 6.9)	41.1 (35.2, 47.2)	31.0 (25.3, 37.2)	18.6 (13.6, 24.7)	100
45-64	4.7 (2.6, 8.3)	6.7 (4.5, 10.0)	36.2 (30.0, 43.0)	32.1 (26.5, 38.2)	20.3 (14.8, 27.2)	100
65+	5.1 (2.7, 9.5)	5.8 (3.0, 11.0)	21.9 (16.3, 28.8)	47.9 (39.2, 56.7)	19.2 (12.8, 27.7)	100
<b>Residence</b>						
Urban	4.7 (3.0, 7.2)	5.8 (4.3, 7.8)	40.1 (32.6, 48.2)	23.8 (17.2, 31.9)	25.6 (17.4, 35.9)	100
Rural	5.4 (3.4, 8.4)	5.1 (3.2, 8.0)	36.8 (29.8, 44.4)	37.7 (30.6, 45.3)	15.1 (9.6, 22.9)	100
<b>Education Level</b>						
Less than primary school completed	3.5 (1.9, 6.4)	5.2 (3.5, 7.6)	27.5 (22.1, 33.6)	44.1 (37.0, 51.5)	19.7 (13.5, 28.0)	100
Primary school completed	5.3 (3.4, 8.0)	5.0 (2.9, 8.2)	34.4 (28.1, 41.4)	35.5 (28.6, 43.0)	19.9 (14.1, 27.2)	100
Secondary school completed	6.2 (3.9, 9.7)	5.2 (2.9, 8.9)	40.1 (33.2, 47.4)	26.2 (19.8, 33.7)	22.4 (16.3, 30.1)	100
High school completed	4.0 (2.3, 6.7)	6.6 (4.7, 9.2)	50.8 (42.7, 58.7)	20.3 (14.9, 27.2)	18.4 (11.9, 27.2)	100
College or University +	11.1 (6.6, 18.1)	5.1 (2.5, 10.1)	50.2 (37.8, 62.6)	14.9 (9.3, 23.1)	18.6 (11.0, 29.7)	100
<b>Occupation/Work status</b>						
Employed	5.4 (3.5, 8.1)	5.6 (4.0, 7.7)	39.7 (33.1, 46.6)	25.4 (20.1, 31.6)	23.9 (16.5, 33.3)	100
Self-employed	4.3 (2.8, 6.5)	5.7 (4.0, 8.2)	37.6 (31.4, 44.3)	35.9 (29.6, 42.8)	16.4 (12.1, 21.9)	100
Students	14.8 (7.9, 25.9)	2.2 (0.6, 7.8)	43.0 (29.5, 57.6)	19.9 (10.4, 34.9)	20.0 (10.9, 33.9)	100
Home makers	2.8 (0.4, 17.9)	6.5 (2.1, 18.5)	31.8 (18.3, 49.3)	32.9 (19.6, 49.5)	26.0 (13.5, 44.1)	100
Un-employed	4.3 (2.3, 7.9)	3.5 (1.5, 8.2)	35.3 (27.3, 44.2)	35.5 (27.2, 44.8)	21.4 (14.5, 30.5)	100

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

## 6. Second-hand smoke

In Indonesia, educational and health-care facilities are smoke-free by law. There is also prohibition in some provinces and cities in other public places, such as restaurants and public transport. The Global Youth Tobacco Survey (GYTS) shows that more than 70% students were exposed to second-hand smoke (SHS) in public places and the Global Health Professions Students Survey (GHPSS) results show that more than 70% of third-year medical and dental students were similarly exposed. However, there were no data on SHS exposure in Indonesia among the adult population in public places, including workplaces, before this survey.

This chapter measures exposure to SHS in indoor workplaces, homes and in certain public places such as government buildings, health-care facilities, restaurants and public transport.

### *Key findings*

- *Among those who work indoors, over half were exposed to SHS at indoor workplaces in the 30 days preceding the survey.*
- *Nearly four in five respondents were exposed to SHS at home.*
- *Nearly four in five of all people were exposed to SHS in restaurants.*

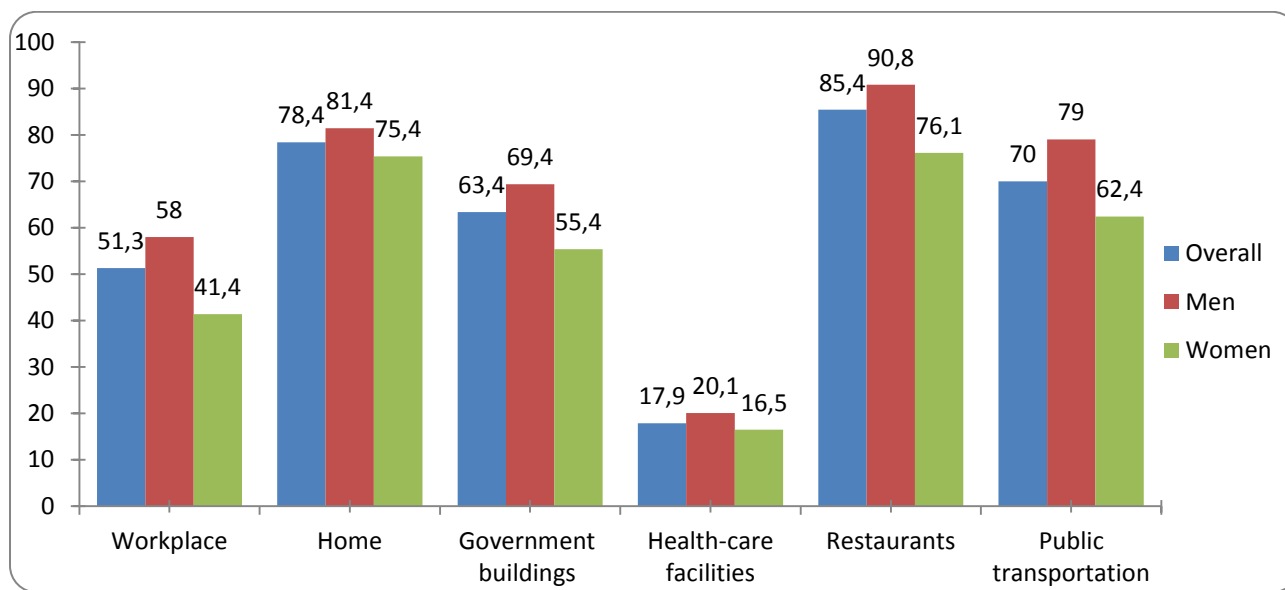
### 6.1. SHS exposure in indoor workplaces

Table 6.1 gives the prevalence and the estimated number (in thousands) of adults exposed to SHS in indoor workplaces over the preceding 30 days.

#### 6.1.1. Prevalence of SHS exposure in indoor workplaces

Exposure to SHS in indoor workplaces was measured among adults aged 15 years and above who usually work indoors, outside of their homes. Table 6.1 shows that overall, 51.3% of workers are exposed to SHS at indoor workplaces. This figure reduces to 45.6% among non-smokers. Exposure to SHS varies across different demographic characteristics of workers, as given in Table 6.1. More men workers are exposed to SHS than women workers, both among the overall population and among non-smokers. Workers in rural areas have a higher proportion of exposure than urban workers. By educational level, secondary school graduates have the highest proportion of exposure to SHS, both overall and among non-smokers.

**Figure. 6.1.** Exposure to second-hand smoke at workplace, home and various public places by gender – GATS Indonesia, 2011



*Note:* All figures are in percentages.



**Table 6.1:** Percentage and number of adults ≥15 years old who work indoors and are exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

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>	51.3 (45.8, 56.8)	14,557.9	45.6 (39.7, 51.7)	8,314.5
<b>Gender</b>				
Male	58.0 (51.6, 64.2)	9,851.4	52.8 (43.6, 61.8)	3,683.3
Female	41.4 (35.4, 47.5)	4,706.5	41.2 (35.3, 47.4)	4,631.2
<b>Age (years)</b>				
15-24	45.9 (37.3, 54.7)	2,510.7	42.8 (32.8, 53.4)	1,680.6
25-44	50.8 (45.0, 56.6)	8,560.7	45.7 (39.7, 51.9)	4,883.2
45-64	57.5 (49.5, 65.2)	3,327.2	49.0 (38.8, 59.3)	1,691.3
65+	--	--	--	--
<b>Residence</b>				
Urban	47.8 (41.2, 54.5)	10,313.2	44.0 (36.8, 51.5)	6,125.7
Rural	62.4 (55.7, 68.7)	4,244.7	51.0 (43.2, 58.7)	2,188.8
<b>Education Level</b>				
Less than primary school completed	63.4 (50.0, 74.9)	1,013.7	47.7 (32.8, 62.9)	468.2
Primary school completed	55.8 (44.1, 66.9)	1,655.7	45.3 (32.3, 59.1)	770.3
Secondary school completed	62.7 (54.0, 70.6)	2,838.1	60.5 (49.2, 70.7)	1,499.8
High school completed	47.9 (41.4, 54.5)	5,585.1	42.8 (34.7, 51.3)	3,176.8
College or University +	45.6 (37.9, 53.5)	3,465.3	42.8 (34.5, 51.5)	2,399.4
<b>Occupation/Work status</b>				
Employed	48.3 (42.7, 53.9)	10,924.7	43.7 (37.6, 50.1)	6,606.9
Self-employed	66.4 (57.6, 74.2)	3,415.4	58.4 (48.3, 67.9)	1,521.5
Students	NA	NA	NA	NA
Home makers	NA	NA	NA	NA
Un-employed	NA	NA	NA	NA

<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.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

NA = not applicable.

### 6.1.2. Number of workers exposed to SHS in indoor workplaces

Table 6.1 shows that, overall, 14.6 million workers are exposed to SHS in the indoor areas of their workplaces. The estimated number of men workers exposed to SHS in indoor workplaces (9.9 million) is nearly twice that of women workers (4.7 million). Classified by age group, the maximum number of adult workers exposed to SHS in indoor workplaces (8.6 million) belongs to the 25–44 years age group. The estimated number of workers living in urban areas who are exposed to SHS in indoor workplaces (10.3 million) is more than twice that of those living in rural areas (4.2 million). Classified by educational level, high school graduates are the most exposed to SHS in indoor workplaces (5.6 million). By occupational category, exposure varies from 3.4 million (self-employed) to 10.9 million (employed).

Among non-smoking workers, the estimated number exposed to SHS at indoor workplaces is 8.3 million. The number of non-smoking women workers who are exposed to SHS in indoor workplaces (4.6 million) is more than that of non-smoking men workers (3.7 million) similarly exposed. The largest number of non-smoking workers who are exposed to SHS in indoor workplaces are in the age group of 25–44 years (4.9 million).

The estimated number of urban non-smoking workers who are exposed to SHS in indoor workplaces (6.1 million) is much more than that of the corresponding category in rural areas (2.2 million). By occupational category, the estimated number of employed non-smokers who are exposed to SHS in indoor workplaces (6.6 million) is much higher than the number of self-employed non-smokers (1.5 million).

## **6.2. SHS exposure at home**

This section provides the prevalence and number (in thousands) of SHS exposure at home in the past 30 days by smoking status and selected demographic categories.

### **6.2.1. Prevalence of SHS exposure at home**

Overall, 78.4% of adults aged 15 years and above were exposed to SHS at homes. Exposure at home does not differ substantially by gender or age group. People living in rural areas have a higher prevalence of exposure to SHS at home (88.2%) than those who live in urban areas (68.5%). Adults with a lower educational level (less than primary school, primary school) have the highest prevalence of exposure to SHS at home (84.5%) and those with college and university level of education have the lowest (57.2%). By occupation, self-employed persons have the highest prevalence of exposure at home (85.3%) of all the occupational categories.

The overall prevalence of exposure to SHS in homes among non-smokers is 71.7%. The prevalence of SHS exposure at home for non-smokers is more among women non-smokers (75.0%) as compared to men (62.0%). Non-smokers living in rural areas are more exposed to SHS at home (83.5%) than those living in urban areas (60.8%). Adult non-smokers with the highest educational level (college and university level) have the lowest exposure to SHS at home (49.2%) as compared to the people with less than primary level (78.1%) and primary level of education (79.4%).

### **6.2.2. Number of adults exposed to SHS at home**

Overall, 133.3 million adults aged 15 years and over are exposed to SHS at home. Considered by gender, the estimated number of men exposed to SHS at home (69.1 million) is higher than the number of women (64.1 million). Classified by age groups, adults aged 25–44 have the highest number of persons who are exposed to SHS at home (59.4 million). Age groups 15–24 years and 45–64 years have similar numbers of exposure of about 32 million. The estimated number of adults living in rural areas who are exposed to SHS at home (75.3 million) is higher than among those living in urban areas (58.0 million).

Classified by educational level, the estimated number of adults who are exposed to SHS at home is highest among those with a primary level of education (39.1 million) and is lowest among those with college and university-level education (6.7 million). By occupational category, unemployed adults have the smallest number of persons who are exposed to SHS at home (about 9.9 million).

**Table 6.2:** Percentage and number of adults ≥15 years old who are exposed to tobacco smoke at home, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Adults exposed to tobacco smoke at home at least monthly			
	Overall		Non-smokers	
	Percentage (95% CI)	Number in thousands	Percentage (95% CI)	Number in thousands
<b>Overall</b>	78.4 (75.1, 81.4)	133,292.1	71.7 (67.7, 75.4)	79,254.3
<b>Gender</b>				
Male	81.4 (78.1, 84.3)	69,155.7	62.0 (56.7, 67.0)	17,250.8
Female	75.4 (71.7, 78.9)	64,136.4	75.0 (71.1, 78.4)	62,003.5
<b>Age (years)</b>				
15-24	80.0 (76.1, 83.3)	32,901.1	76.5 (71.9, 80.6)	23,229.0
25-44	77.5 (73.7, 80.9)	59,445.5	69.4 (64.6, 73.8)	33,127.1
45-64	79.7 (75.7, 83.2)	32,074.8	71.7 (66.8, 76.1)	17,440.1
65+	74.4 (68.9, 79.2)	8,870.7	67.1 (60.3, 73.2)	5,458.1
<b>Residence</b>				
Urban	68.5 (62.8, 73.7)	57,971.5	60.8 (54.5, 66.7)	34,886.5
Rural	88.2 (84.4, 91.2)	75,320.6	83.5 (78.3, 87.6)	44,367.8
<b>Education Level</b>				
Less than primary school completed	84.5 (80.4, 87.8)	31,529.2	78.1 (73.5, 82.1)	17,963.1
Primary school completed	84.5 (81.3, 87.2)	39,182.1	79.4 (75.3, 83.0)	23,072.0
Secondary school completed	79.0 (75.3, 82.3)	28,024.0	73.5 (68.9, 77.6)	17,689.4
High school completed	71.3 (66.1, 76.1)	27,864.1	63.1 (57.1, 68.8)	16,351.7
College or University +	57.2 (49.4, 64.6)	6,673.3	49.2 (40.4, 58.0)	4,158.7
<b>Occupation/Work status</b>				
Employed	74.0 (68.6, 78.7)	35,768.8	62.2 (55.8, 68.3)	15,980.9
Self-employed	85.3 (82.3, 87.9)	49,938.0	75.5 (70.5, 79.8)	21,891.8
Students	72.5 (66.8, 77.6)	10,001.3	70.9 (64.5, 76.6)	8,370.3
Home makers	76.3 (71.8, 80.2)	27,617.9	75.9 (71.4, 79.9)	26,738.3
Un-employed	76.2 (70.7, 81.0)	9,926.8	71.0 (63.9, 77.2)	6,273.1

Among non-smokers, the estimated number exposed to SHS at home is 79.3 million. The number of non-smoker women who are exposed to SHS at home (62.0 million) is much higher than the men counterparts (17.3 million). The pattern of exposure to SHS at home among non-smokers follows a similar pattern as observed for the overall adult population. By age groups, non-smokers aged 25–44 have the highest number of persons exposed to SHS at home (33.1 million). The estimated number of adults living in rural areas who are exposed to SHS at home (44.4 million) is higher than those living in urban areas (34.9 million). Classified by educational levels, the estimated number of adults who are exposed to SHS at home is highest among those with primary level of education (23.0 million) and lowest among those at college and university level (4.2 million). By occupational category, the lowest number of persons who are exposed to SHS at home are unemployed adults (about 6.3 million).

### 6.3. Exposure to SHS in public places

Common sites of exposure to SHS in public places are government buildings, health-care facilities, restaurants and public transport. Table 6.3 presents the prevalence of SHS exposure for the overall populace and non-smokers among adults 15 years and above in these public places in the 30 days preceding the survey.

#### 6.3.1. Prevalence of exposure to SHS in government buildings

Overall prevalence of exposure to SHS in government buildings for adults 15 years and above is 63.4%. The prevalence of exposure to SHS among men (69.4%) is higher than that among women (55.4%). The age groups 25–44 years and 45–64

years have similar prevalences of exposure, of about 66%. Adults living in rural areas have a higher prevalence of exposure (71.2%) than those living in urban areas (58.6%). The prevalence rate is similar across all educational categories. By occupational category, the student group has the lowest exposure (41.5%).

Among non-smokers, overall, 57.9% are exposed to SHS in government buildings. Men non-smokers are exposed to SHS more often than women (62.6% and 55.7%, respectively). By age group, non-smokers aged 25–44 years have the highest prevalence of exposure (61.7%). Non-smokers living in rural areas have a higher prevalence of exposure to SHS than those who live in urban areas. The prevalence rate for non-smokers is similar across all educational categories. By occupation, students have the least prevalence of exposure (46.5%).

### **6.3.2. Prevalence of exposure to SHS at health-care facilities**

Table 6.3 reveals that 17.9% of overall adults are exposed to SHS at health-care facilities. By gender, men have a higher prevalence of exposure to SHS (20.1%) than women (16.5%). The age groups 15–24 years and 45–64 years have a similar prevalence of exposure of about 19.0%, which is higher than that for the other two age groups. Adults living in urban areas have a higher prevalence of exposure (20.0%) than those who live in rural areas (15.1%).

Among non-smokers, the overall prevalence rate of SHS exposure at health-care facilities is 16.8%. By gender, men and women non-smokers have a similar prevalence of exposure of about 17.0%. The 45–64 years age group has the highest prevalence of exposure at health-care facilities (20.0%). Urban dwellers have a higher prevalence (19.0%) than rural dwellers (13.8%).

### **6.3.3. Prevalence of exposure to SHS in restaurants**

Overall exposure to SHS at restaurants for adults aged 15 years and above is 85.4%. The prevalence rate reported for men (90.8%) is higher than that for women (76.1%). By age group, non-smokers aged 15–24 years and 25–44 years have the highest prevalence of exposure to SHS at restaurants (about 86%). Adults living in urban areas have a higher prevalence of exposure (87.4%) than those who live in rural areas (81.7%).

The prevalence of SHS exposure at restaurants for non-smokers is 80.5%. Men non-smokers have a higher prevalence of exposure than women (87.9% and 76.0%, respectively). Prevalence of exposure to SHS at restaurants is higher among non-smokers aged 15–24 years and 25–44 years (above 80%) than other age groups. Non-smokers living in urban areas have a higher prevalence of exposure (83.5%) than those who live in rural areas (73.7%).

### **6.3.4. Prevalence of exposure to SHS in public transport**

Table 6.3 shows that overall, 70.0% of adults are exposed to SHS in public transport. By gender, men have a higher prevalence of exposure to SHS in public transport (79.0%) than women (62.4%). The 15–24 years age group has the highest prevalence of exposure (77.8%) among all age groups. Adults living in rural and urban areas have similar prevalence levels of exposure of about 70%. By occupation, the student group has the highest prevalence of exposure to SHS in public transport (81.0%).

The overall prevalence rate of exposure to SHS in public transport for non-smokers is 65.8%. Men non-smokers have a higher prevalence of exposure to SHS in public transport (78.4%) than women non-smokers (62.0%). The prevalence of exposure is higher among non-smokers aged 15–24 years (76.0%) than other age groups. Non-smokers living in rural areas and urban areas have similar levels of exposure of about 65%.

**Table 6.3.** Percentage of overall adults 15 years and above who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Exposure to tobacco smoke <sup>1</sup> in...			
	Government buildings	Health-care facilities	Restaurants	Public transportation
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	63.4 (58.5, 68.1)	17.9 (15.0, 21.1)	85.4 (80.9, 88.9)	70.0 (65.6, 74.0)
<i>Gender</i>				
Men	69.4 (63.0, 75.1)	20.1 (16.2, 24.7)	90.8 (87.3, 93.5)	79.0 (74.7, 82.8)
Women	55.4 (49.7, 61.0)	16.5 (13.7, 19.8)	76.1 (69.5, 81.7)	62.4 (56.6, 67.8)
<i>Age (years)</i>				
15–24	52.5 (43.5, 61.3)	14.8 (11.1, 19.6)	85.7 (81.7, 88.9)	77.8 (72.0, 82.7)
25–44	66.7 (61.7, 71.3)	19.5 (16.3, 23.0)	86.5 (81.2, 90.5)	70.6 (65.7, 75.1)
45–64	66.3 (59.2, 72.7)	19.2 (14.4, 25.0)	83.7 (76.8, 88.8)	62.2 (56.7, 67.4)
65+	47.6 (30.1, 65.6)	10.3 (6.0, 17.3)	68.2 (53.2, 80.2)	52.8 (41.8, 63.5)
<i>Residence</i>				
Urban	58.6 (52.3, 64.6)	20.0 (15.8, 24.9)	87.4 (83.8, 90.2)	70.2 (64.5, 75.3)
Rural	71.2 (63.3, 78.0)	15.1 (11.7, 19.3)	81.7 (70.3, 89.4)	69.6 (62.6, 75.7)
<i>Educational level</i>				
Less than primary school completed	64.2 (54.4, 72.9)	15.2 (11.3, 20.2)	75.5 (65.6, 83.3)	60.8 (54.3, 66.9)
Primary school completed	63.0 (53.2, 71.8)	17.5 (13.3, 22.7)	89.5 (83.7, 93.4)	65.7 (58.6, 72.2)
Secondary school completed	61.9 (52.7, 70.4)	18.2 (13.7, 23.8)	85.4 (79.4, 89.9)	74.4 (68.9, 79.3)
High school completed	61.8 (55.9, 67.3)	17.4 (13.9, 21.5)	84.1 (79.0, 88.2)	75.1 (68.9, 80.5)
College & university +	68.1 (60.3, 75.0)	24.4 (17.2, 33.5)	88.4 (81.0, 93.2)	69.9 (61.4, 77.1)
<i>Occupation/work status</i>				
Employed	66.7 (60.1, 72.6)	18.8 (15.1, 23.2)	88.0 (83.5, 91.4)	72.7 (67.4, 77.5)
Self-employed	68.8 (60.9, 75.8)	18.5 (13.9, 24.3)	87.6 (83.1, 91.1)	71.5 (66.7, 75.9)
Students	41.5 (29.2, 54.9)	17.5 (11.5, 25.5)	84.1 (77.2, 89.2)	81.0 (73.2, 87.0)
Home-makers	56.4 (48.2, 64.3)	17.4 (14.0, 21.5)	71.2 (61.0, 79.6)	61.1 (54.0, 67.8)
Unemployed	48.5 (33.9, 63.2)	13.0 (8.3, 19.7)	88.0 (79.1, 93.4)	60.5 (51.1, 69.2)

<sup>1</sup> Among all adults in the past 30 days

**Table 6.3 (cont.).** Percentage of non-smoker adults 15 years and above who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Exposure to tobacco smoke <sup>1</sup> in...			
	Government buildings	Health-care facilities	Restaurants	Public transportation
	<i>Percentage (95% CI)</i>			
<b>Non-smokers</b>	57.9 (53.0, 62.7)	16.8 (14.1, 19.8)	80.5 (75.3, 84.8)	65.8 (60.7, 70.6)
<i>Gender</i>				
Men	62.6 (54.7, 69.9)	17.5 (13.0, 23.3)	87.9 (84.1, 90.9)	78.4 (72.7, 83.2)
Women	55.7 (49.9, 61.3)	16.5 (13.7, 19.9)	76.0 (69.2, 81.7)	62.0 (56.1, 67.6)
<i>Age (years)</i>				
15–24	52.0 (43.3, 60.7)	14.3 (10.5, 19.1)	82.4 (77.6, 86.4)	76.0 (69.4, 81.6)
25–44	61.7 (56.4, 66.8)	17.3 (14.6, 20.4)	81.3 (75.0, 86.4)	65.9 (60.1, 71.3)
45–64	56.9 (48.1, 65.2)	20.0 (14.9, 26.3)	76.9 (67.6, 84.1)	53.9 (47.1, 60.5)
65+	43.2 (24.9, 63.6)	12.0 (6.7, 20.6)	62.2 (43.9, 77.7)	47.0 (34.9, 59.5)
<i>Residence</i>				
Urban	53.5 (47.7, 59.2)	19.0 (15.2, 23.4)	83.5 (78.9, 87.2)	66.5 (59.6, 72.7)
Rural	65.7 (56.7, 73.7)	13.8 (10.5, 17.9)	73.7 (60.8, 83.6)	64.7 (57.0, 71.8)
<i>Educational level</i>				
Less than primary school completed	50.5 (38.8, 62.1)	15.1 (11.0, 20.4)	60.2 (47.2, 71.9)	50.6 (43.1, 58.1)
Primary school completed	55.9 (45.0, 66.3)	16.9 (12.7, 22.2)	85.6 (75.9, 91.8)	59.9 (52.4, 66.9)
Secondary school completed	57.4 (46.3, 67.8)	17.2 (13.1, 22.3)	80.0 (73.4, 85.3)	70.8 (64.1, 76.8)
High school completed	56.6 (49.9, 63.1)	15.8 (12.2, 20.2)	79.1 (73.1, 84.1)	73.0 (65.6, 79.3)
College & university +	65.7 (58.1, 72.7)	20.9 (14.9, 28.4)	85.4 (77.1, 91.1)	67.8 (58.1, 76.2)
<i>Occupation/work status</i>				
Employed	64.2 (57.6, 70.2)	15.1 (11.6, 19.3)	84.7 (78.7, 89.3)	69.4 (62.8, 75.3)
Self-employed	55.2 (44.3, 65.6)	17.4 (12.9, 23.1)	79.8 (75.2, 83.8)	60.8 (54.5, 66.7)
Students	46.5 (32.1, 61.5)	18.1 (11.9, 26.5)	81.4 (73.6, 87.2)	81.1 (72.5, 87.4)
Home-makers	56.4 (48.2, 64.2)	17.7 (14.2, 21.8)	71.2 (60.8, 79.7)	60.7 (53.3, 67.7)
Unemployed	45.9 (29.2, 63.7)	13.9 (8.3, 22.3)	86.2 (74.1, 93.2)	57.0 (45.6, 67.7)

<sup>1</sup> Among all adults in the past 30 days

**Table 6.3A.** Percentage of overall adults 15 years and above who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Exposure to tobacco smoke <sup>1</sup> in...			
	Universities	Schools and educational facilities	Religious facilities	Bars/night clubs
	<i>Percentage (95% CI)</i>			
<b>Overall</b>	54.3 (46.6, 61.8)	38.4 (33.7, 43.5)	17.6 (13.9, 22.0)	91.8 (75.1, 97.6)
<i>Gender</i>				
Men	57.2 (46.9, 67.0)	45.9 (39.8, 52.1)	21.2 (16.6, 26.6)	91.3 (73.7, 97.5)
Women	49.4 (41.0, 57.7)	31.9 (26.9, 37.3)	12.8 (9.8, 16.5)	-
<i>Age (years)</i>				
15–24	58.0 (45.7, 69.5)	50.3 (42.8, 57.7)	16.7 (12.6, 21.8)	-
25–44	51.8 (42.1, 61.4)	31.9 (27.2, 37.0)	18.1 (14.2, 22.8)	-
45–64	41.2 (25.1, 59.4)	35.3 (28.1, 43.3)	18.2 (14.2, 23.0)	-
65+	0.0	17.0 (7.1, 35.5)	15.3 (10.5, 21.6)	0.0
<i>Residence</i>				
Urban	52.5 (43.7, 61.1)	36.2 (30.0, 43.0)	14.0 (9.6, 19.8)	91.3 (67.4, 98.2)
Rural	59.2 (43.5, 73.3)	41.5 (34.3, 49.0)	21.4 (15.8, 28.4)	-
<i>Educational level</i>				
Less than primary school complete	0.0	26.0 (19.0, 34.5)	18.1 (13.0, 24.7)	-
Primary school completed	-	38.2 (31.8, 45.0)	21.3 (15.7, 28.3)	-
Secondary school completed	-	44.3 (37.3, 51.5)	17.1 (13.3, 21.7)	-
High school completed	60.2 (50.8, 69.0)	33.6 (27.7, 40.2)	14.5 (11.2, 18.7)	-
College & university +	45.9 (34.8, 57.5)	42.7 (33.9, 52.0)	14.7 (10.4, 20.4)	-
<i>Occupation/work status</i>				
Employed	55.1 (44.5, 65.1)	41.6 (34.6, 49.0)	17.6 (13.4, 22.7)	-
Self-employed	43.6 (27.1, 61.5)	34.1 (28.2, 40.5)	21.1 (15.9, 27.5)	-
Students	58.8 (46.8, 69.9)	53.9 (44.7, 62.8)	14.7 (10.1, 20.8)	-
Home-makers	-	20.6 (15.6, 26.6)	13.2 (9.5, 18.2)	-
Unemployed	59.3 (35.8, 79.3)	31.6 (20.3, 45.7)	14.0 (9.3, 20.5)	-

<sup>1</sup> Among all adults in the past 30 days

- Indicator estimate based on less than 25 unweighted cases and has been suppressed.

**Table 6.3A (cont.).** Percentage of non-smoker adults 15 years and above who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Exposure to tobacco smoke <sup>1</sup> in...			
	Universities	Schools and educational facilities	Religious facilities	Bars/night clubs
	Percentage (95% CI)			
<b>Non-smokers</b>	55.4 (47.1, 63.4)	36.5 (31.4, 41.9)	13.9 (10.9, 17.5)	-
<i>Gender</i>				
Men	62.8 (49.9, 74.1)	47.3 (39.7, 55.0)	16.3 (12.6, 20.7)	-
Women	49.0 (40.7, 57.4)	31.9 (26.9, 37.4)	12.7 (9.7, 16.5)	-
<i>Age (years)</i>				
15–24	62.7 (51.9, 72.4)	47.9 (40.1, 55.8)	14.9 (11.3, 19.3)	-
25–44	42.8 (31.4, 55.1)	29.7 (24.8, 35.1)	13.6 (10.4, 17.6)	-
45–64	41.1 (20.2, 65.8)	30.3 (22.8, 39.0)	14.1 (10.6, 18.6)	-
65+	0.0	-	10.6 (6.7, 16.3)	-
<i>Residence</i>				
Urban	52.3 (42.8, 61.6)	34.2 (27.6, 41.5)	11.0 (7.5, 15.9)	-
Rural	63.3 (46.4, 77.6)	39.7 (32.1, 47.8)	17.2 (12.7, 22.9)	-
<i>Educational level</i>				
Less than primary school completed	-	21.5 (13.8, 31.9)	13.4 (9.0, 19.4)	-
Primary school completed	-	36.3 (29.2, 44.0)	16.1 (11.8, 21.6)	-
Secondary school completed	-	43.0 (35.4, 50.9)	15.0 (11.3, 19.5)	-
High school completed	63.3 (53.6, 72.1)	30.7 (24.6, 37.5)	11.4 (8.4, 15.4)	-
College & university +	37.3 (25.2, 51.3)	40.3 (31.9, 49.3)	12.7 (8.8, 18.1)	-
<i>Occupation/work status</i>				
Employed	52.3 (39.7, 64.7)	41.3 (33.6, 49.4)	13.4 (10.5, 17.1)	-
Self-employed	-	28.8 (22.7, 35.8)	14.9 (10.7, 20.5)	-
Students	63.2 (51.9, 73.2)	52.8 (43.4, 62.1)	14.0 (9.3, 20.5)	-
Home-makers	-	20.5 (15.5, 26.6)	13.3 (9.5, 18.4)	-
Unemployed	-	24.3 (12.7, 41.5)	13.1 (8.2, 20.4)	-

<sup>1</sup> Among all adults in the past 30 days

- Indicator estimate based on less than 25 unweighted cases and has been suppressed.



## 7. Economics

Indonesia is the fifth-largest tobacco-producing country in the world. The total production of cigarettes in 2011 was 258 billion sticks. Studies in 2010 estimated that 190 260 Indonesians (100 680 men and 89 580 women) died Over a period of one year due to consumption of tobacco, which is about 12.4% of total deaths (1 539 288) from all causes. The total loss of productivity due to premature mortality and disabilities due to consumption of tobacco was 3 533 000 disability-adjusted life years (DALYs). The macroeconomic loss, which is estimated by applying the 2010 GDP per capita, i.e. IDR26 895 061.00 (US\$ 3091.00) to the total loss of productivity (3 533 000 DALYs) is US\$ 10.92 billion or IDR 105.92 trillion

This chapter focuses on different brands of kretek cigarettes purchased by current smokers during their last purchase, the source of the last purchase and expenditure on kretek cigarettes.

### **Key findings**

- *The most preferred cigarettes are kretek cigarettes.*
- *The preferred kretek brands are Gudang Garam, Djarum, Sampoerna, Dji Sam Soe and Tali Jagad.*
- *About 79.8% of kretek cigarette smokers purchase cigarettes from kiosks.*
- *On an average, a kretek cigarette smoker spends IDR 198 761.00 per month on purchasing kretek cigarettes.*
- *The average price of a pack (20 sticks) of kretek cigarettes is IDR 12 699.00.*
- *Of the average income in terms of GDP per capita, 4.71% was spent on the purchase of 100 packs of kretek cigarettes in the year 2011.*

### **7.1. Last brand of kretek cigarettes purchased**

During the survey, respondents were asked to report on the brand names of the last cigarettes purchased by them. The survey demonstrated that in Indonesia, the top five brands currently being used by adults are Gudang Garam (21.8%), Djarum (18.8%), Sampoerna (15.4%), Dji Sam Soe (6.0%) and Tali Jagad (5.3%) (Table 7.1).

**Table 7.1.** Percentage of current kretek cigarette smokers 15 years and above, by last brand purchased and selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Last kretek cigarette brand purchased					
	Gudang Garam	Djarum	Sampoerna	Dji Sam Soe	Tali Jagad	Other
	<i>Percentage (95% CI)</i>					
<b>Overall</b>	21.8 (18.4, 25.5)	18.8 (14.6, 23.9)	15.4 (13.0, 18.0)	6.0 (4.6, 7.7)	5.3 (2.5, 11.0)	32.8 (27.7, 38.3)
<i>Gender</i>						
Men	21.9 (18.5, 25.7)	18.3 (14.2, 23.2)	15.7 (13.3, 18.4)	6.2 (4.8, 8.0)	5.4 (2.5, 11.1)	32.6 (27.5, 38.1)
Women	17.9 (10.1, 29.7)	33.4 (21.3, 48.2)	5.4 (2.4, 11.7)	0.0	3.9 (1.0, 13.2)	39.4 (26.8, 53.5)
<i>Age (years)</i>						
15–24	12.1 (8.7, 16.5)	20.7 (14.7, 28.3)	24.0 (18.6, 30.3)	2.8 (1.4, 5.5)	4.1 (1.8, 9.2)	36.3 (28.9, 44.5)
25–44	23.0 (19.0, 27.7)	18.0 (13.7, 23.3)	15.4 (12.8, 18.4)	6.9 (5.2, 9.1)	5.6 (2.6, 11.8)	31.1 (25.6, 37.1)
45–64	26.2 (21.1, 31.9)	19.4 (14.9, 24.9)	11.2 (8.2, 15.1)	6.8 (4.8, 9.6)	5.7 (2.5, 12.4)	30.7 (25.1, 37.0)
65+	22.7 (15.3, 32.4)	16.0 (9.7, 25.2)	3.0 (1.0, 8.7)	4.3 (2.0, 9.3)	5.4 (2.0, 13.5)	48.5 (38.2, 58.9)
<i>Residence</i>						
Urban	24.1 (19.5, 29.3)	20.5 (15.4, 26.8)	23.3 (19.1, 28.1)	9.6 (7.1, 12.9)	2.8 (0.8, 9.8)	19.7 (14.8, 25.8)
Rural	19.8 (15.2, 25.4)	17.4 (11.4, 25.6)	8.8 (6.6, 11.5)	2.9 (1.8, 4.7)	7.4 (3.0, 17.3)	43.6 (35.3, 52.3)
<i>Educational level</i>						
Less than primary school completed	18.5 (13.3, 25.2)	15.8 (10.6, 22.7)	7.4 (4.4, 12.2)	2.7 (1.6, 4.8)	4.7 (2.0, 10.5)	50.9 (42.4, 59.3)
Primary school completed	21.6 (17.2, 26.8)	21.2 (15.5, 28.3)	10.1 (7.7, 13.2)	3.3 (2.0, 5.3)	9.5 (4.3, 19.8)	34.3 (27.1, 42.3)
Secondary school completed	21.7 (17.2, 26.9)	23.9 (17.6, 31.5)	19.6 (15.4, 24.6)	7.5 (4.7, 11.6)	3.6 (1.3, 9.1)	23.8 (18.2, 30.6)
High school completed	23.4 (18.9, 28.7)	16.5 (12.2, 21.8)	22.1 (18.1, 26.6)	9.1 (6.8, 12.3)	2.7 (1.1, 6.6)	26.1 (20.0, 33.4)
College & university +	29.2 (21.1, 39.0)	9.4 (4.8, 17.4)	33.1 (23.3, 44.6)	15.1 (9.9, 22.3)	2.4 (0.5, 10.2)	10.8 (6.7, 17.0)
<i>Occupation/work status</i>						
Employed	20.1 (16.2, 24.6)	20.7 (15.3, 27.3)	19.5 (15.7, 24.0)	8.2 (5.8, 11.5)	5.3 (2.2, 12.2)	26.3 (20.8, 32.7)
Self-employed	22.9 (18.7, 27.8)	15.6 (11.6, 20.7)	12.3 (9.8, 15.2)	4.3 (3.1, 5.9)	6.1 (2.4, 14.8)	38.7 (32.0, 45.8)
Students	23.6 (14.1, 36.8)	15.3 (7.2, 29.4)	29.5 (18.7, 43.2)	1.6 (0.4, 7.1)	0.0	29.9 (16.6, 47.8)
Home-makers	12.6 (4.5, 30.7)	45.6 (26.5, 66.0)	7.4 (2.3, 21.6)	0.0	0.0	34.4 (18.1, 55.6)
Unemployed	24.1 (15.4, 35.7)	26.4 (16.8, 38.7)	9.1 (4.8, 16.3)	8.4 (4.6, 15.0)	3.5 (1.2, 9.9)	28.5 (20.2, 38.6)

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

## 7.2. Source of last purchase of kretek cigarettes

Table 7.2 shows that overall, kretek cigarettes were most commonly purchased at kiosks (79.8%) and at stores (17.6%). The largest proportion that purchased the cigarettes at kiosks was men (79.9%), those in the age group of 15–24 years (81.1%), and rural dwellers (80.6%).

The other sources of purchase (2.6%) included street vendors, duty-free shops, outside the country and from another person.

**Table 7.2.** Percentage distribution of kretek cigarette smokers 15 years and above, by the source of last purchase of kretek cigarettes and selected demographic characteristics – GATS Indonesia, 2011

Source	Overall	Gender		Age (years)		Residence	
		Men	Women	15–24	≥ 25	Urban	Rural
Percentage (95% CI)							
Store	17.6 (12.1, 24.7)	17.4 (12.1, 24.4)	21.8 (11.5, 37.6)	16.1 (9.3, 26.6)	17.9 (12.6, 24.9)	19.4 (12.2, 29.5)	16.0 (8.9, 27.1)
Kiosk	79.8 (72.4, 85.6)	79.9 (72.6, 85.6)	77.8 (62.1, 88.3)	81.1 (70.5, 88.5)	79.5 (72.3, 85.2)	78.8 (68.8, 86.2)	80.6 (69.1, 88.6)
Other	2.6 (1.0, 6.7)	2.7 (1.0, 7.0)	0.4 (0.0, 2.6)	2.7 (0.8, 9.5)	2.6 (1.1, 6.3)	1.7 (1.0, 3.1)	3.4 (0.9, 12.3)
Total	100	100	100	100	100	100	100

*Note:* Other includes: street vendor, duty-free shop, outside the country, from another person or other

## 7.3. Expenditure on cigarettes

Information was collected on expenditure incurred on kretek cigarettes. The average price paid by smokers aged 15 years and above by selected demographic characteristics was calculated and is presented in Table 7.3.

On an average, a current kretek cigarette smoker spends IDR 198 761.00 per month on kretek cigarettes.

The highest spending is incurred by smokers aged 25–44 years, at IDR 215 598.00 per month. Urban cigarette smokers spend IDR 214 607.00 per month, which is IDR 29 118.00 higher than the average amount spent by rural smokers (IDR 185 489.00).

Expenditure on kretek cigarettes shows an increase by education level, with college or university graduates spending the highest amount, i.e. IDR 238 855.00 per month.

Among the occupational categories, employed workers spend the highest amount (IDR 211 845.00 per month).

**Table 7.3.** Average price paid and expenditure on kretek cigarettes among users of these products aged 15 years and above, by selected demographic characteristics – GATS Indonesia, 2011

Demographic characteristics	Kretek (Rupiah)		
	Price per 20 sticks (median)	Price per 20 sticks	Expenditure per month
<b>Overall</b>	12500	12718.91 (12121.60,13316.22)	369947.68 (296455.85,443439.50)
<i>Gender</i>			
Men	12500	12753.22 (12150.36,13356.08)	373809.40 (299004.38,448614.42)
Women	8750	11019.85 (9045.20,12994.51)	178263.37 (135876.46,220650.29)
<i>Age (years)</i>			
15–24	13750	13437.61 (12639.80,14235.41)	401364.73 (222612.85,580116.60)
25–44	12500	12984.11 (12079.82,13888.40)	332876.16 (286318.63,379433.68)
45–64	11667	12072.31 (11499.31,12645.30)	338832.99 (272645.54,405020.44)
65+	10000	10309.31 (8864.95,11753.67)	963778.99 (-517412.23,2444970.21)
<i>Residence</i>			
Urban	14375	14095.10 (13210.85,14979.35)	351424.38 (291845.69,411003.07)
Rural	11250	11614.66 (10817.86,12411.45)	384751.32 (261295.39,508207.25)
<i>Educational level</i>			
Less than primary school completed	10000	10288.98 (9499.03,11078.93)	392751.23 (123521.18,661981.28)
Primary school completed	11667	12163.07 (11046.83,13279.30)	329359.14 (252041.45,406676.83)
Secondary school completed	13750	14183.70 (12621.33,15746.06)	332147.11 (283287.01,381007.20)
High school completed	14375	13968.14 (13181.94,14754.34)	439713.21 (300402.96,579023.46)
College & university +	15000	14659.87 (13910.99,15408.75)	337284.24 (303400.39,371168.09)
<i>Occupation/work status</i>			
Employed	13333	13388.80 (12519.93,14257.68)	368053.70 (287209.73,448897.68)
Self-employed	11667	12048.70 (11279.26,12818.14)	317280.57 (276394.38,358166.75)
Students	15000	14299.21 (12747.43,15850.99)	257367.55 (206986.12,307748.98)
Home makers	8750	11981.58 (9137.81,14825.34)	150243.30 (114498.36,185988.24)
Unemployed	13750	13629.40 (12362.53,14896.28)	922414.85 (-83351.89,1928181.59)

## 8. Media

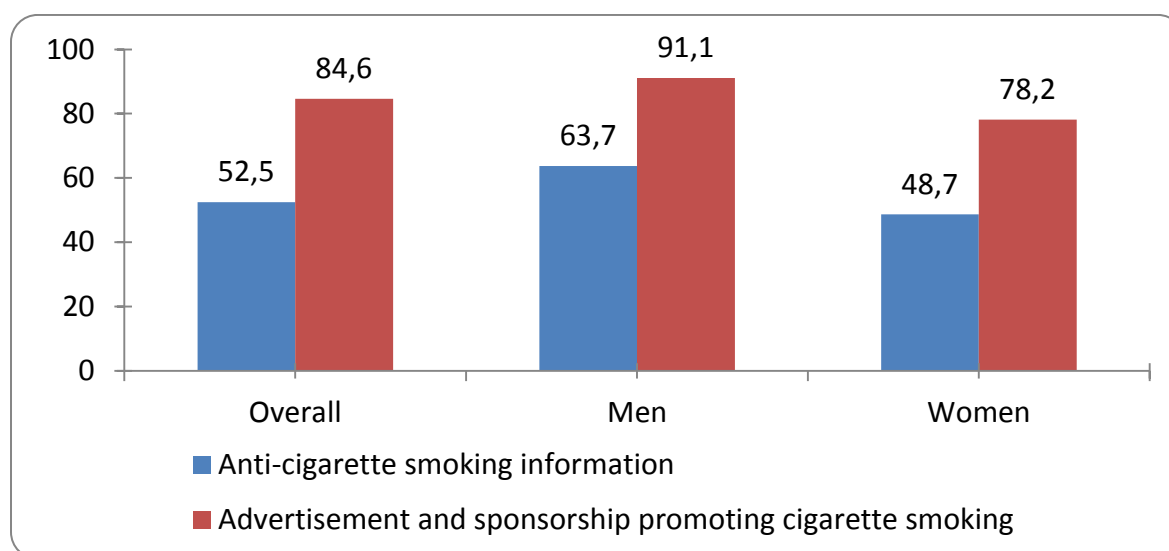
The Tobacco Control Act in Indonesia has banned advertisement of tobacco products in a very limited way. Advertisement at the point of sale is not banned. Tobacco industries are using various marketing tactics to attract young people. Some subnational governments have banned advertisements, but this does not have the desired effect as electronic transmission is not under their control. Various nongovernmental organizations have been campaigning for tobacco control for the past two decades by raising awareness, both in the general populace and among policy-makers, for enforcement of the ban. The government has taken steps to remove visible signboards and billboards advertising tobacco products. The Act has made it compulsory for industries to provide a specific textual health warning on every advertisement and on packets of all smoked tobacco products; however, it has been implemented on cigarettes packets only. Smokeless tobacco products are not covered by the law.

### **Key findings**

- *Nearly half the population noticed anti-smoking information in any location.*
- *Nearly three in five people in urban areas noticed anti-smoking information while two in five noticed it in rural areas.*
- *Nearly four in five people noticed cigarette advertisements and marketing in any location.*
- *Nearly nine in ten people noticed cigarette advertisements and marketing in urban areas, while eight in ten noticed these in urban areas.*
- *Nearly seven in 10 current smokers noticed a health warning on cigarette packages, and about three in 10 current cigarette smokers thought about quitting because of the health warning.*

The GATS in Indonesia provides an opportunity to track tobacco control interventions and focus on media awareness among both smokers and non-smokers. The data presented in this chapter provide information on the perceptions of adults as a result of anti-smoking information in the various mass media and public places, health warnings on different tobacco products and all forms of cigarette advertising. In general, adults (both men and women) reported noticing significantly more pro-cigarette advertisements than the anti-cigarette smoking messages (Figure 8.1).

**Figure. 8.1.** Noticing anti- and pro-cigarette smoking information, by gender – GATS Indonesia, 2011



*Note:* All figures are in percentages.

### 8.1. Percentage of adults 15 years and above who noticed anti-smoking information during the past 30 days in various places

This section covers the degree of awareness of anti-smoking information in the media and displayed in public places. This includes newspapers or magazines, television, radio, billboards and somewhere else. Table 8.1 shows that overall, 52.7% of people aged 15 years and above noticed anti-smoking information at any location. The largest overall percentage noticed the information while watching television or listening to radio programmes (40.9%), followed by billboards (30.4%), newspapers or magazines (10.6%) and somewhere else (8.4%). Anti-smoking information at any location was noticed more by men (57.1%), people in the younger age group of 15–24 years (63.0%) and people living in urban areas (64.3%) as compared to their counterparts. Men are more likely to notice anti-smoking information in newspapers, magazines and billboards. Young people were more likely to notice anti-smoking information on radio, television and billboards. People living in urban areas were more likely to notice anti-smoking information in almost all places, with the exception of radio (Table 8.1).

There is no substantial difference in the percentage of people who noticed anti-smoking information between the overall population (52.7%), current smokers (53.1%) and non-smokers (52.2%) at various locations and in any location (Table 8.1). In the categories of current smokers and non-smokers, men and people living in urban areas were more likely to notice anti-smoking information.

**Table 8.1:** Percentage of adults ≥15 years old who noticed anti-cigarette smoking information during the last 30 days in various places, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Places	Overall	Gender		Age(years)		Residence	
		Male	Female	15-24	≥ 25	Urban	Rural
Percentage (95% CI)							
<b>Overall</b>							
In newspapers or in magazines	10.6 (8.9, 12.5)	12.6 (10.5, 14.9)	8.6 (7.1, 10.4)	13.2 (10.4, 16.5)	9.8 (8.2, 11.7)	15.1 (12.1, 18.7)	6.1 (4.8, 7.7)
On television or the radio	40.9 (37.0, 45.0)	43.5 (39.1, 48.0)	38.4 (34.4, 42.5)	49.2 (43.8, 54.5)	38.3 (34.5, 42.3)	51.1 (45.0, 57.2)	30.7 (25.9, 36.0)
On television	39.7 (35.8, 43.7)	42.3 (38.0, 46.8)	37.0 (33.1, 41.1)	48.1 (42.8, 53.5)	37.0 (33.2, 40.9)	49.8 (43.6, 55.9)	29.5 (24.8, 34.6)
On the radio	5.0 (4.1, 6.1)	5.4 (4.3, 6.7)	4.6 (3.7, 5.8)	5.4 (4.0, 7.5)	4.9 (3.9, 6.0)	6.3 (4.9, 8.2)	3.7 (2.6, 5.1)
On billboards	30.4 (26.9, 34.2)	35.2 (31.1, 39.6)	25.6 (22.3, 29.2)	38.7 (33.3, 44.4)	27.8 (24.5, 31.3)	41.6 (35.6, 47.8)	19.2 (15.3, 23.8)
Somewhere else	8.4 (6.7, 10.4)	9.2 (7.4, 11.5)	7.5 (5.8, 9.7)	9.9 (7.7, 12.7)	7.9 (6.2, 9.9)	11.0 (8.3, 14.4)	5.8 (4.0, 8.2)
Any Location	52.7 (48.6, 56.8)	57.1 (52.6, 61.4)	48.3 (44.1, 52.6)	63.0 (57.6, 68.0)	49.4 (45.3, 53.6)	64.3 (57.9, 70.2)	41.0 (35.7, 46.6)
<b>Current smokers<sup>1</sup></b>							
In newspapers or in magazines	9.4 (7.8, 11.2)	9.6 (8.0, 11.5)	3.8 (1.4, 10.0)	7.3 (4.8, 11.0)	9.8 (8.1, 11.9)	14.0 (10.9, 17.8)	5.4 (4.2, 6.9)
On television or the radio	40.3 (36.0, 44.7)	40.8 (36.4, 45.4)	26.1 (17.5, 37.1)	47.9 (40.4, 55.5)	38.6 (34.5, 42.9)	51.7 (44.7, 58.7)	30.5 (25.5, 35.9)
On television	38.8 (34.6, 43.2)	39.4 (35.1, 43.9)	22.8 (15.5, 32.3)	45.9 (38.4, 53.6)	37.2 (33.2, 41.4)	50.1 (43.1, 57.1)	29.1 (24.3, 34.4)
On the radio	5.5 (4.3, 7.0)	5.6 (4.3, 7.1)	4.5 (1.8, 10.9)	6.7 (4.3, 10.3)	5.3 (3.9, 7.0)	6.9 (4.9, 9.6)	4.4 (3.1, 6.1)
On billboards	32.1 (28.2, 36.3)	32.8 (28.8, 37.1)	14.3 (8.2, 23.8)	37.0 (29.7, 44.9)	31.0 (27.2, 35.0)	45.4 (39.0, 52.1)	20.7 (16.2, 26.1)
Somewhere else	8.4 (6.5, 10.7)	8.5 (6.6, 10.9)	5.5 (2.4, 12.1)	8.3 (5.4, 12.7)	8.4 (6.5, 10.8)	11.5 (8.4, 15.5)	5.7 (3.7, 8.7)
Any Location	53.1 (48.5, 57.7)	53.8 (49.1, 58.5)	34.1 (24.3, 45.6)	59.8 (52.1, 67.0)	51.6 (47.1, 56.1)	66.1 (58.8, 72.7)	42.0 (36.1, 48.0)
<b>Non-smokers<sup>2</sup></b>							
In newspapers or in magazines	11.3 (9.4, 13.5)	18.6 (15.1, 22.8)	8.8 (7.2, 10.6)	15.2 (12.0, 19.2)	9.8 (7.9, 12.0)	15.6 (12.3, 19.5)	6.5 (4.9, 8.6)
On television or the radio	41.3 (37.1, 45.6)	49.0 (43.4, 54.7)	38.7 (34.7, 42.9)	49.6 (44.0, 55.2)	38.2 (34.1, 42.4)	50.8 (44.6, 57.0)	30.9 (25.7, 36.7)
On television	40.1 (36.0, 44.4)	48.3 (42.7, 53.9)	37.4 (33.4, 41.6)	48.9 (43.4, 54.4)	36.8 (32.8, 41.0)	49.6 (43.4, 55.8)	29.7 (24.6, 35.3)
On the radio	4.7 (3.8, 5.9)	5.0 (3.6, 6.9)	4.6 (3.6, 5.9)	5.0 (3.4, 7.3)	4.6 (3.7, 5.8)	6.1 (4.6, 8.0)	3.2 (2.2, 4.8)
On billboards	29.5 (25.8, 33.6)	40.2 (34.6, 46.1)	25.9 (22.5, 29.6)	39.3 (33.5, 45.4)	25.8 (22.3, 29.6)	39.7 (33.6, 46.3)	18.3 (14.3, 23.0)
Somewhere else	8.4 (6.6, 10.6)	10.8 (8.1, 14.1)	7.6 (5.8, 9.8)	10.5 (7.9, 13.9)	7.6 (5.9, 9.7)	10.7 (7.9, 14.4)	5.8 (3.9, 8.6)
Any Location	52.5 (48.1, 56.8)	63.7 (58.0, 69.0)	48.7 (44.4, 53.1)	64.1 (58.5, 69.3)	48.1 (43.7, 52.6)	63.5 (56.9, 69.5)	40.5 (34.8, 46.5)

Note: Includes both white cigarettes and kretek cigarettes.

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

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

## 8.2. Noticed health warning labels on cigarette packages and thought about quitting

Table 8.2 shows that 72.2% of current smokers noticed health warnings on cigarette packages. A higher percentage of men noticed these compared to women (73.3% and 45.4%, respectively). More smokers in the younger age groups (84.3% in the 15–24 years and 79.3% in the 25–44 years age group) noticed health warnings as compared to those in the older age groups (45–64 years and 65+ years). By residence, an almost equal proportion of current tobacco smokers in urban and rural areas noticed warnings on cigarette packages (73.1% for urban and 71.5% for rural). More than 70% of current smokers who had at least primary school education noticed warnings on cigarette packages. However, only 46.7% of current smokers who had less than primary education noticed such warnings. By occupation, home-makers noticed health warnings on cigarette packages least (49.5%).

Among current smokers (including daily and occasional smokers), 27.1% thought about quitting smoking because of the health warnings. Approximately this same percentage of current smokers across all age groups thought about quitting smoking because of the health warnings, except current smokers aged 65+ years among whom only 7.8% thought about it. Thinking about quitting smoking due to such warnings was the same for urban and rural areas (27.9% for urban and 26.3% for rural areas). Smokers in the lowest educational group (less than primary) thought less about quitting as compared to the other educational groups.



**Table 8.2:** Percentage of current smokers ≥15 years old 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 Indonesia, 2011.

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>	Warning labels led to think about quitting <sup>3</sup>		
			A lot	A little	Don't know
<b>Overall</b>			<i>Percentage (95% CI)</i>		
<b>Gender</b>					
Male	72.2 (67.4, 76.6)	27.1 (23.5, 30.9)	29.8 (24.5, 35.7)	67.5 (61.4, 73.0)	2.7 (1.6, 4.7)
Female	73.3 (68.3, 77.7)	27.5 (23.8, 31.5)	29.7 (24.4, 35.7)	67.7 (61.6, 73.3)	2.5 (1.4, 4.5)
<b>Age (years)</b>					
15-24	45.4 (32.7, 58.7)	17.0 (10.0, 27.2)	--	--	--
25-44	84.3 (78.1, 88.9)	28.8 (22.9, 35.4)	28.6 (17.3, 43.5)	70.4 (55.9, 81.8)	1.0 (0.1, 6.5)
45-64	79.3 (73.4, 84.1)	30.8 (26.3, 35.7)	27.2 (22.1, 33.1)	70.2 (64.0, 75.6)	2.6 (1.2, 5.6)
65+	59.9 (54.0, 65.5)	23.7 (19.7, 28.2)	34.1 (26.9, 42.0)	61.6 (53.3, 69.2)	4.4 (2.0, 9.1)
	35.6 (27.2, 44.9)	7.8 (4.7, 12.6)	--	--	--
<b>Residence</b>					
Urban	73.1 (65.4, 79.5)	27.9 (22.9, 33.5)	34.7 (27.9, 42.2)	61.4 (53.4, 68.8)	3.9 (1.9, 7.6)
Rural	71.5 (65.0, 77.1)	26.3 (21.5, 31.8)	25.4 (17.7, 35.0)	73.0 (63.4, 80.8)	1.7 (0.7, 4.1)
<b>Education Level</b>					
Less than primary school completed	46.7 (40.1, 53.5)	13.7 (10.8, 17.3)	29.7 (21.3, 39.6)	66.1 (56.5, 74.5)	4.2 (1.6, 10.7)
Primary school completed	74.1 (67.8, 79.5)	27.3 (22.5, 32.7)	29.2 (22.0, 37.7)	66.7 (58.4, 74.1)	4.0 (2.0, 8.0)
Secondary school completed	81.2 (75.5, 85.9)	30.7 (25.4, 36.6)	27.8 (20.3, 36.8)	71.4 (62.1, 79.1)	0.8 (0.2, 3.9)
High school completed	85.4 (78.4, 90.4)	36.2 (29.3, 43.6)	32.6 (23.2, 43.7)	65.6 (54.3, 75.4)	1.8 (0.5, 5.8)
College or University +	88.7 (80.2, 93.8)	34.5 (26.0, 44.1)	26.4 (16.0, 40.2)	69.0 (52.9, 81.6)	4.6 (1.1, 17.6)
<b>Occupation/Work status</b>					
Employed	76.0 (68.5, 82.1)	29.1 (24.6, 34.0)	26.2 (20.3, 33.1)	71.6 (64.8, 77.6)	2.2 (1.1, 4.4)
Self-employed	70.1 (64.2, 75.4)	26.0 (21.5, 31.0)	31.5 (24.1, 39.8)	66.2 (57.9, 73.7)	2.3 (1.1, 4.9)
Students	83.7 (71.3, 91.3)	31.0 (19.4, 45.8)	--	--	--
Home makers	49.5 (31.4, 67.7)	19.0 (9.1, 35.3)	--	--	--
Un-employed	66.9 (57.8, 74.9)	23.4 (16.3, 32.5)	33.0 (17.3, 53.8)	57.7 (38.3, 75.0)	9.3 (2.7, 27.7)

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

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

<sup>3</sup> Includes respondents who thought about quitting because of warning label

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

## **8.3. Marketing**

### **8.3.1. Noticed cigarette marketing in various public places**

Table 8.3 presents the distribution of adults aged 15 years and above who noticed cigarette marketing in the past 30 days in public places and the media, such as in stores where cigarettes are sold, on television, radio, billboards, posters, newspapers or magazines, internet, cinemas, public transport/stations, public walls and banners; and cigarette promotion through free samples, sales, coupons, free gifts, etc. The percentage of people who noticed any cigarette advertisement, sponsorship or promotion was 84.6%. Men, people in the younger age group (15–24 years) and people living in urban areas were more likely to notice cigarette marketing as compared to their counterparts.

The commonest site for noticing cigarette advertisements was on television (66.3%), followed by banners (47.7%), stores (45.6%), posters (42.3%), billboards (39.6%), public walls (16.1%), public transport vehicles/stations (13.5%), and newspapers or magazines (10.1%). The percentage of adults who noticed sports sponsorships was 32.1%. The most common type of promotion noticed was clothing and other items with the brand name or logo (29.5%). Other promotional activities noticed were free samples (5.6%), mail promoting cigarettes (5.0%) and sale prices (4.6%).

### **8.3.2. Noticed white cigarette marketing in various public places**

Table 8.3A presents the distribution of adults aged 15 years and above who noticed white cigarette marketing in the past 30 days in several locations as described in the table. The percentage of people who noticed any white cigarette advertisement, sponsorship or promotion was 40.9%. It did not differ substantially by gender or age; however, people in urban areas noticed white cigarette advertisements and marketing more than people in urban areas.

The most common site of noticing white cigarette advertisements was on television (27.5%), followed by stores (16.6%), banners (16.0%), posters (15.9%), billboards (15.7%), newspapers or magazines (5.2%), public transport vehicles/stations (5.0%) and public walls (4.5%). The percentage of adults who noticed sports sponsorships was 8.5%. The most common type of promotion noticed was clothing and other items with the brand name or logo (7.8%). Other promotional activities noticed were mail promoting cigarettes (2.5%), free samples (1.8%) and sale prices (1.2%).

### **8.3.3. Noticed kretek cigarette marketing in various public places**

Table 8.3B presents the distribution of adults aged 15 years and above who noticed kretek cigarette marketing in the past 30 days in different locations, as indicated in the table. The percentage of adults who noticed any kretek cigarette advertisement, sponsorship or promotion was 84.2%. Men, people in the younger age group (15–24 years) and people living in urban areas were more likely to notice kretek cigarette marketing as compared to their counterparts.

The most common site of noticing kretek cigarette advertisements was on television (65.9%). Other sites were banners (47.0%), stores (44.9%), posters (41.8%), billboards (38.8%), public walls (15.8%), public transport/vehicles (13.1%), and newspapers or magazines (9.7%). The percentage of adults who noticed sports sponsorships was 31.4%. The most common type of promotion noticed was clothing and other items with the brand name or logo (28.9%). Other promotional activities noticed were free samples (5.0%), mail promoting cigarettes (4.7%), sale prices (4.3%) and free gifts/discounts on other products (2.2%).

**Table 8.3:** Percentage of adults ≥15 years old who noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Indonesia, 2011.

Places	Overall	Gender		Age(years)		Residence	
		Male	Female	15-24	≥ 25	Urban	Rural
Noticed advertisements							
In stores	45.6 (40.7, 50.6)	53.4 (47.8, 59.1)	37.8 (33.4, 42.4)	52.8 (46.9, 58.7)	43.3 (38.4, 48.3)	51.4 (44.4, 58.5)	39.7 (33.0, 46.8)
On television	66.3 (62.5, 69.9)	72.3 (68.4, 75.9)	60.3 (56.3, 64.2)	77.1 (72.4, 81.2)	62.9 (58.9, 66.6)	73.9 (68.8, 78.5)	58.6 (52.9, 64.1)
On the radio	4.6 (3.7, 5.8)	5.5 (4.3, 7.1)	3.7 (2.9, 4.7)	5.5 (3.8, 7.9)	4.3 (3.5, 5.3)	5.6 (4.2, 7.4)	3.6 (2.4, 5.2)
On billboards	39.6 (35.4, 44.0)	48.7 (43.8, 53.6)	30.6 (26.8, 34.7)	49.5 (43.2, 55.8)	36.5 (32.6, 40.6)	50.6 (43.8, 57.4)	28.6 (23.6, 34.2)
On posters	42.3 (38.2, 46.5)	49.6 (45.0, 54.2)	35.0 (31.1, 39.1)	52.7 (47.2, 58.1)	39.0 (35.1, 43.0)	46.3 (39.9, 52.9)	38.3 (33.3, 43.5)
In newspapers or magazines	10.1 (8.2, 12.2)	12.3 (9.8, 15.3)	7.8 (6.4, 9.6)	12.6 (9.8, 16.2)	9.2 (7.6, 11.2)	14.3 (11.0, 18.3)	5.8 (4.4, 7.7)
In cinemas	0.6 (0.3, 1.0)	0.6 (0.3, 1.3)	0.5 (0.3, 0.9)	1.3 (0.6, 2.7)	0.4 (0.2, 0.7)	1.0 (0.5, 1.8)	0.2 (0.1, 0.5)
On the internet	1.9 (1.4, 2.5)	2.4 (1.8, 3.2)	1.4 (0.9, 2.1)	4.2 (3.2, 5.6)	1.1 (0.7, 1.8)	2.9 (2.0, 4.0)	0.9 (0.5, 1.4)
On public transportation vehicles/stations	13.5 (10.9, 16.6)	16.8 (13.4, 20.8)	10.3 (8.1, 13.0)	17.7 (13.5, 22.8)	12.2 (9.9, 14.9)	19.7 (15.0, 25.3)	7.4 (5.4, 10.1)
On public walls	16.1 (12.6, 20.2)	20.5 (16.1, 25.7)	11.7 (8.9, 15.0)	21.5 (16.8, 27.2)	14.3 (11.2, 18.2)	21.7 (16.1, 28.6)	10.4 (6.9, 15.3)
On banners	47.7 (43.4, 52.2)	56.5 (51.3, 61.5)	39.1 (35.0, 43.3)	54.9 (49.0, 60.6)	45.5 (41.2, 49.8)	54.2 (47.8, 60.5)	41.2 (35.2, 47.5)
Somewhere else	7.9 (5.9, 10.6)	9.5 (7.0, 12.7)	6.4 (4.7, 8.7)	10.6 (7.7, 14.6)	7.1 (5.2, 9.6)	9.2 (6.4, 13.0)	6.7 (4.0, 10.9)
Noticed sports sponsorship	32.1 (28.3, 36.2)	44.5 (39.6, 49.4)	19.8 (16.5, 23.6)	40.0 (34.5, 45.7)	29.6 (26.0, 33.5)	39.4 (33.3, 45.9)	24.8 (20.4, 29.7)
Music/Fashion	20.2 (17.3, 23.4)	25.4 (21.8, 29.4)	15.0 (12.6, 17.8)	31.6 (26.6, 37.1)	16.5 (14.1, 19.4)	28.8 (24.1, 34.0)	11.5 (8.4, 15.6)
Noticed cigarette promotions							
Free samples	5.6 (4.7, 6.8)	7.8 (6.4, 9.4)	3.5 (2.7, 4.6)	6.4 (4.6, 8.9)	5.4 (4.5, 6.5)	7.5 (6.0, 9.2)	3.8 (2.7, 5.4)
Sale prices	4.6 (3.8, 5.7)	5.8 (4.7, 7.2)	3.5 (2.6, 4.6)	5.8 (4.5, 7.4)	4.3 (3.4, 5.4)	6.5 (5.1, 8.3)	2.7 (1.8, 4.1)
Coupons	1.1 (0.8, 1.7)	1.5 (1.0, 2.3)	0.8 (0.5, 1.2)	1.5 (0.9, 2.7)	1.0 (0.7, 1.6)	1.6 (1.0, 2.6)	0.7 (0.3, 1.3)
Free gifts/discounts on other products	2.5 (1.9, 3.3)	2.9 (2.2, 3.8)	2.1 (1.4, 3.1)	2.5 (1.6, 3.7)	2.5 (1.8, 3.4)	2.5 (1.7, 3.8)	2.4 (1.6, 3.6)
Clothing/item with brand name or logo	29.6 (25.9, 33.5)	35.5 (31.0, 40.2)	23.7 (20.5, 27.2)	36.9 (31.9, 42.1)	27.2 (23.7, 31.1)	34.9 (29.3, 40.9)	24.2 (19.6, 29.5)
Mail promoting cigarettes	5.0 (3.3, 7.4)	6.4 (4.2, 9.6)	3.6 (2.4, 5.4)	7.5 (4.9, 11.5)	4.2 (2.8, 6.2)	7.2 (4.3, 12.0)	2.7 (1.7, 4.3)
Noticed any advertisement, sponsorship or promotion	84.6 (82.1, 86.8)	91.1 (88.8, 92.9)	78.2 (75.1, 80.9)	93.6 (90.9, 95.6)	81.7 (79.1, 84.1)	89.7 (87.0, 91.9)	79.5 (75.2, 83.1)

Note: Includes both white and kretek cigarettes.

Note: Includes both white and kretek cigarettes.

**Table 8.3A:** Percentage of adults ≥15 years old who noticed white cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Indonesia, 2011.

Places	Overall	Gender		Age(years)		Residence	
		Male	Female	15-24	≥ 25	Urban	Rural
		Percentage (95% CI)					
Noticed advertisements							
In stores	16.6 (12.8, 21.3)	20.0 (15.4, 25.5)	13.2 (10.0, 17.3)	20.2 (15.0, 26.5)	15.5 (11.8, 19.9)	21.7 (15.6, 29.3)	11.5 (7.4, 17.4)
On television	27.5 (22.1, 33.6)	29.9 (24.2, 36.3)	25.0 (19.7, 31.3)	31.7 (25.0, 39.3)	26.1 (20.9, 32.1)	36.8 (27.8, 46.8)	18.0 (12.8, 24.9)
On the radio	1.8 (1.2, 2.5)	2.1 (1.4, 3.2)	1.4 (1.0, 2.1)	2.0 (1.1, 3.3)	1.7 (1.2, 2.5)	2.9 (1.9, 4.3)	0.7 (0.3, 1.3)
On billboards	15.7 (12.3, 19.9)	19.3 (15.3, 24.1)	12.2 (9.2, 15.9)	20.0 (15.0, 26.3)	14.4 (11.3, 18.2)	24.6 (18.2, 32.3)	6.8 (4.9, 9.5)
On posters	15.9 (12.3, 20.5)	19.0 (14.7, 24.1)	12.9 (9.6, 17.1)	20.5 (15.1, 27.3)	14.5 (11.1, 18.6)	21.3 (15.3, 28.8)	10.5 (6.8, 16.1)
In newspapers or magazines	5.2 (3.8, 7.2)	6.3 (4.5, 8.9)	4.1 (2.9, 5.7)	5.6 (3.4, 9.1)	5.1 (3.8, 6.9)	8.4 (5.7, 12.1)	2.1 (1.2, 3.4)
In cinemas	0.3 (0.1, 0.7)	0.3 (0.1, 0.8)	0.3 (0.1, 0.6)	0.7 (0.2, 2.1)	0.2 (0.0, 0.5)	0.5 (0.2, 1.3)	0.0 (0.0, 0.2)
On the internet	1.3 (0.9, 1.9)	1.6 (1.1, 2.3)	1.0 (0.6, 1.7)	2.5 (1.7, 3.7)	0.9 (0.6, 1.5)	2.1 (1.3, 3.2)	0.5 (0.3, 1.0)
On public transportation vehicles/stations	5.0 (3.1, 7.9)	6.4 (4.0, 10.3)	3.6 (2.3, 5.7)	6.3 (3.4, 11.5)	4.6 (3.0, 7.1)	8.5 (5.0, 14.2)	1.5 (0.8, 2.7)
On public walls	4.5 (3.0, 6.7)	5.7 (3.8, 8.6)	3.3 (2.1, 5.2)	6.1 (3.9, 9.4)	4.0 (2.6, 6.1)	6.5 (4.0, 10.3)	2.5 (1.2, 5.4)
On banners	16.0 (12.2, 20.6)	18.3 (13.9, 23.8)	13.6 (10.2, 17.8)	18.5 (13.4, 25.0)	15.1 (11.6, 19.5)	22.6 (16.3, 30.4)	9.3 (5.8, 14.5)
Somewhere else	2.1 (1.3, 3.4)	2.3 (1.4, 3.9)	1.8 (1.1, 3.0)	2.5 (1.5, 4.2)	1.9 (1.1, 3.2)	2.8 (1.8, 4.6)	1.3 (0.4, 4.1)
Noticed sports sponsorship	8.5 (6.2, 11.4)	10.9 (8.1, 14.5)	6.1 (4.1, 8.9)	10.5 (7.2, 15.2)	7.8 (5.8, 10.6)	13.0 (9.0, 18.4)	3.9 (2.5, 6.2)
Music/Fashion	6.1 (4.3, 8.6)	7.4 (5.2, 10.5)	4.7 (3.3, 6.8)	9.6 (6.6, 13.8)	5.0 (3.4, 7.2)	9.4 (6.5, 13.5)	2.7 (1.1, 6.4)
Noticed cigarette promotions							
Free samples	1.8 (1.2, 2.7)	2.4 (1.6, 3.6)	1.1 (0.7, 1.8)	1.1 (0.6, 2.1)	2.0 (1.3, 3.0)	2.6 (1.7, 4.1)	0.9 (0.3, 2.3)
Sale prices	1.2 (0.8, 1.9)	1.6 (1.0, 2.5)	0.8 (0.5, 1.4)	1.0 (0.6, 1.8)	1.3 (0.8, 2.0)	1.7 (1.2, 2.6)	0.7 (0.2, 2.1)
Coupons	0.2 (0.1, 0.4)	0.2 (0.1, 0.5)	0.2 (0.1, 0.5)	0.3 (0.1, 0.8)	0.2 (0.1, 0.4)	0.3 (0.1, 0.5)	0.2 (0.0, 0.6)
Free gifts/discounts on other products	0.7 (0.4, 1.1)	0.9 (0.6, 1.6)	0.4 (0.2, 0.9)	0.6 (0.2, 1.5)	0.7 (0.4, 1.2)	0.8 (0.5, 1.4)	0.6 (0.2, 1.4)
Clothing/item with brand name or logo	7.8 (5.4, 11.1)	9.9 (6.8, 14.2)	5.7 (3.9, 8.2)	9.9 (6.3, 15.1)	7.2 (5.0, 10.2)	10.5 (6.5, 16.5)	5.1 (3.1, 8.4)
Mail promoting cigarettes	2.5 (1.3, 4.9)	3.2 (1.6, 6.3)	1.9 (1.0, 3.8)	3.6 (1.7, 7.5)	2.2 (1.1, 4.2)	4.5 (2.1, 9.3)	0.5 (0.3, 1.1)
Noticed any advertisement, sponsorship or promotion							
	40.9 (34.9, 47.2)	45.9 (39.4, 52.5)	36.0 (30.1, 42.4)	46.7 (39.5, 54.1)	39.1 (33.2, 45.3)	51.1 (41.6, 60.6)	30.7 (23.7, 38.6)

**Table 8.3B:** Percentage of adults ≥15 years old who noticed kretek cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Indonesia, 2011.

Places	Overall	Gender		Age(years)		Residence	
		Male	Female	15-24 Percentage (95% CI)	≥ 25	Urban	Rural
Noticed advertisements							
In stores	44.9 (40.0, 49.9)	52.7 (47.1, 58.3)	37.1 (32.6, 41.7)	51.9 (45.9, 57.8)	42.6 (37.8, 47.6)	50.4 (43.3, 57.4)	39.3 (32.7, 46.5)
On television	65.9 (62.1, 69.6)	72.0 (68.0, 75.6)	59.9 (55.8, 63.9)	76.6 (71.9, 80.7)	62.5 (58.6, 66.3)	73.3 (68.3, 77.9)	58.5 (52.7, 64.0)
On the radio	4.4 (3.5, 5.5)	5.3 (4.1, 6.9)	3.5 (2.8, 4.5)	5.2 (3.6, 7.5)	4.2 (3.4, 5.2)	5.3 (4.0, 7.0)	3.6 (2.4, 5.2)
On billboards	38.8 (34.6, 43.2)	47.8 (42.9, 52.7)	29.9 (26.1, 34.0)	48.6 (42.3, 54.9)	35.7 (31.8, 39.8)	49.2 (42.5, 56.0)	28.4 (23.3, 34.0)
On posters	41.8 (37.7, 46.0)	48.9 (44.3, 53.6)	34.7 (30.8, 38.9)	52.0 (46.4, 57.5)	38.6 (34.7, 42.6)	45.5 (39.1, 52.1)	38.1 (33.1, 43.4)
In newspapers or magazines	9.7 (7.9, 11.9)	11.9 (9.4, 14.9)	7.5 (6.1, 9.2)	12.0 (9.1, 15.6)	9.0 (7.3, 11.0)	13.6 (10.4, 17.6)	5.8 (4.3, 7.7)
In cinemas	0.5 (0.3, 1.0)	0.5 (0.2, 1.2)	0.5 (0.3, 0.9)	1.1 (0.5, 2.7)	0.3 (0.2, 0.7)	0.9 (0.4, 1.7)	0.2 (0.1, 0.5)
On the internet	1.6 (1.1, 2.2)	1.9 (1.4, 2.8)	1.2 (0.8, 1.9)	3.7 (2.7, 5.0)	0.9 (0.5, 1.5)	2.5 (1.7, 3.6)	0.6 (0.4, 1.2)
On public transportation vehicles/stations	13.1 (10.5, 16.2)	16.2 (12.8, 20.1)	10.1 (7.9, 12.7)	17.2 (13.0, 22.4)	11.8 (9.6, 14.5)	18.9 (14.3, 24.5)	7.3 (5.3, 9.9)
On public walls	15.8 (12.4, 19.9)	20.1 (15.7, 25.3)	11.4 (8.7, 14.8)	21.1 (16.3, 26.7)	14.1 (10.9, 17.9)	21.2 (15.6, 28.2)	10.2 (6.8, 15.2)
On banners	47.0 (42.6, 51.5)	55.5 (50.3, 60.7)	38.6 (34.5, 42.8)	54.0 (48.1, 59.8)	44.8 (40.5, 49.2)	53.1 (46.6, 59.4)	40.9 (34.9, 47.3)
Somewhere else	7.5 (5.5, 10.2)	9.0 (6.5, 12.1)	6.1 (4.4, 8.4)	10.3 (7.3, 14.2)	6.7 (4.9, 9.1)	8.6 (5.9, 12.3)	6.5 (3.9, 10.8)
Noticed sports sponsorship	31.4 (27.6, 35.6)	43.5 (38.6, 48.5)	19.4 (16.1, 23.2)	39.0 (33.5, 44.8)	29.0 (25.4, 33.0)	38.3 (32.0, 45.0)	24.5 (20.2, 29.4)
Music/Fashion	19.4 (16.5, 22.7)	24.4 (20.8, 28.5)	14.4 (12.0, 17.2)	29.8 (24.7, 35.4)	16.1 (13.6, 18.9)	27.4 (22.7, 32.7)	11.3 (8.2, 15.5)
Noticed cigarette promotions							
Free samples	5.0 (4.1, 6.0)	6.8 (5.5, 8.3)	3.1 (2.4, 4.1)	5.8 (4.1, 8.1)	4.7 (3.9, 5.7)	6.4 (5.1, 8.1)	3.5 (2.5, 4.8)
Sale prices	4.3 (3.4, 5.3)	5.2 (4.1, 6.6)	3.3 (2.5, 4.4)	5.6 (4.3, 7.2)	3.9 (3.0, 5.0)	5.8 (4.4, 7.7)	2.7 (1.8, 4.0)
Coupons	1.1 (0.7, 1.6)	1.5 (0.9, 2.3)	0.7 (0.4, 1.2)	1.4 (0.7, 2.5)	1.0 (0.6, 1.6)	1.5 (0.9, 2.5)	0.7 (0.3, 1.3)
Free gifts/discounts on other products	2.2 (1.6, 3.0)	2.5 (1.8, 3.3)	2.0 (1.3, 3.0)	1.9 (1.2, 3.1)	2.3 (1.7, 3.1)	2.0 (1.3, 3.2)	2.4 (1.6, 3.5)
Clothing/item with brand name or logo	28.9 (25.3, 32.8)	34.8 (30.3, 39.5)	23.1 (19.9, 26.5)	36.0 (31.1, 41.4)	26.6 (23.1, 30.5)	34.2 (28.6, 40.3)	23.6 (19.0, 28.8)
Mail promoting cigarettes	4.7 (3.0, 7.1)	5.9 (3.8, 9.2)	3.4 (2.2, 5.2)	7.1 (4.4, 11.1)	3.9 (2.5, 5.9)	6.8 (3.9, 11.7)	2.5 (1.5, 4.1)
Noticed any advertisement, sponsorship or promotion							

## 9. Knowledge, Attitudes and Perceptions

Despite conclusive evidence on the dangers of tobacco use, relatively few tobacco users understand that smoking harms nearly every organ of the body and causes many diseases. In addition, smoking affects the health of both smokers and non-smokers. This chapter presents the perceptions and views of the overall population aged 15 years and above about the hazards of smoking and its various dimensions, such as beliefs about serious illnesses caused by smoking and using smokeless tobacco, and the adverse health effects caused by exposure to second-hand smoke (SHS).

### *Key findings*

- *Over four in five people believe that smoking causes serious illness (86.0%) and lung cancer (84.7%).*
- *Less than half of the people believe that smoking causes premature birth (49.5%) and stroke (45.5%).*
- *Less than two in five people believe that smoking causes chronic obstructive pulmonary disease (COPD, 36.0%).*
- *Less than three in ten people believe that smoking causes bladder cancer (27.7%), bone loss (20.4%) and stomach cancer (18.5%).*
- *As many as 73.7% of adults believe that exposure to other people's smoke causes serious illnesses in non-smokers.*
- *Less than one fourth of people (23.9%) believe that smokeless tobacco use causes serious illnesses.*

### 9.1. Beliefs about the ill effects of tobacco use

#### 9.1.1. Beliefs about the ill effects of smoked tobacco use

The GATS collected information on general beliefs regarding the health effects of tobacco smoking as well as on causing various diseases among the population aged 15 years and above. Table 9.1 presents the percentage of adults who believe that smoking causes serious illness, stroke, heart attack or lung cancer by current smoking status and selected demographic characteristics. Table 9.1A presents the percentage of adults who believe that smoking causes other specific diseases such as chronic obstructive pulmonary disease (COPD), bladder cancer, stomach cancer, premature birth or bone loss.

Table 9.1 shows that a majority of the overall population believes that smoking causes serious illness, heart attack and lung cancer (86.0%, 81.5% and 84.7%, respectively). However, fewer people feel that smoking can cause stroke (45.5%). These figures are similar when considered by various demographic characteristics. There is no difference in perceptions between men and women. However, the 65+ years age group, and people with less than primary school level of education have lesser awareness of the ill effects of smoking as compared to others. By occupation, students are the most aware that smoking causes serious illness (97.0%), heart attack (95.5%) and lung cancer (95.7%), and 61.5% of them are also aware that smoking causes stroke.

Among current smokers, the overall belief that smoking causes serious illness, stroke and heart attack (81.3%, 78.3% and 81.0%, respectively) shows the same trend and similar percentages as for the overall population. The least awareness is about stroke (40.0%). Men are more aware than women of the harmful effects of smoking on all these illnesses, and urban people are more aware than rural dwellers. Among other demographic groups, the 65+ year age group shows the least awareness, as do smokers with less than primary levels of education and the unemployed.

Non-smokers have a greater belief than smokers about the ill effects of smoking. Percentages of those who believed that smoking causes serious illness, heart attack and lung cancer are 88.5%, 83.1% and 86.7%, respectively. Percentages for the younger age group (15–24 years), college or university graduates and those employed are highest among their respective demographic groups.

Table 9.1A gives the details of those who believe that smoking causes COPD, bladder cancer, stomach cancer, premature birth or bone loss, separately for the overall population, smokers and non-smokers. The awareness levels regarding these diseases is much less than the ones described earlier, with overall percentage figures being COPD – 36.0%, bladder cancer – 27.7%, stomach cancer – 18.5%, premature birth – 49.5% and bone loss – 20.4%. Awareness levels by demographic characteristics follow a similar pattern as that for the earlier diseases. Men are more aware of the ill effects of smoking than women. The 15–24 years age group, urban populace, college or university graduates and the employed are the most aware among their respective demographic categories. The pattern and percentages are similar for smokers and for non-smokers.

### **9.1.2. Beliefs about the ill effects of smokeless tobacco use**

Table 9.1B presents the percentage of adults aged 15 years and above who believe that using smokeless tobacco causes serious illness by the status of smokeless tobacco use. Overall, only 23.9% of adults believe that using smokeless tobacco causes serious illness. There is no significant difference in belief by gender and residence. The 65+ year's age group has the least belief (14.4%) among all age groups. People with college and university level of education have the maximum belief (36.5%) and those with less than primary level education have the least (17.6%). The unemployed occupational group has the least awareness among all occupational groups (18.9%).

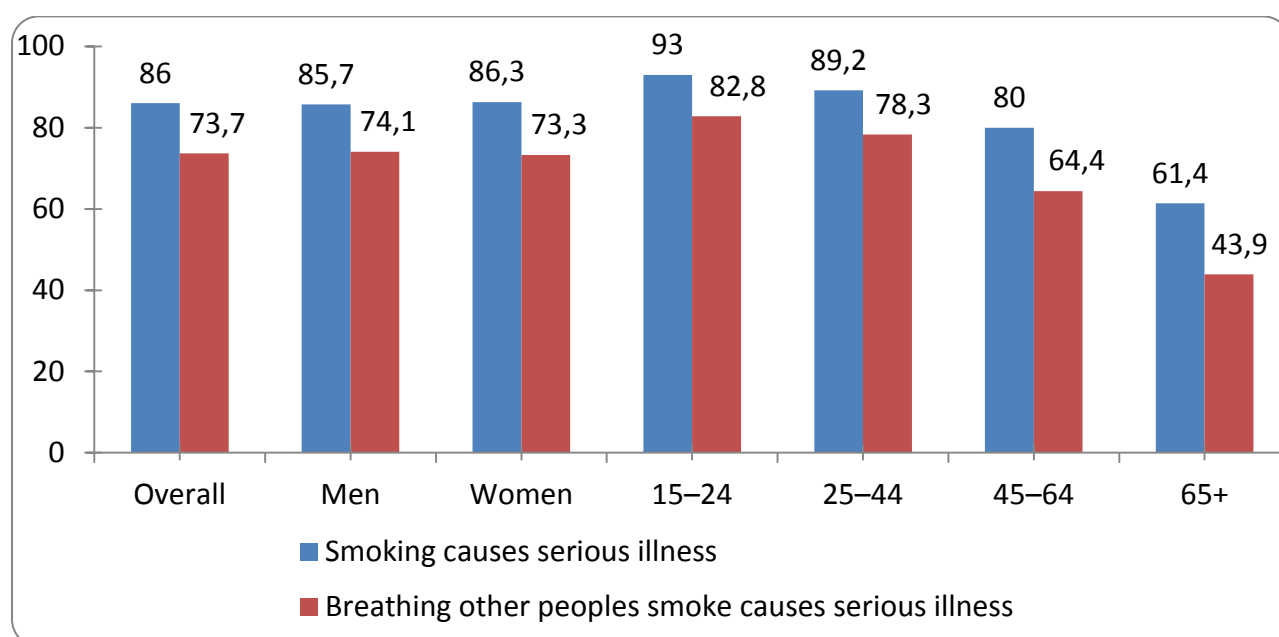
Among current users of smokeless tobacco, the percentage of men who believe that smokeless tobacco is harmful for health is 39.0% as against only 13.3% for women. By age group, the highest percentage with this belief is among those in the 25–44 years age group (30.5%) and the lowest in the 65+ year's age group (3.4%). Urban and rural users of smokeless tobacco both have approximately 25% awareness levels. Those with less than primary levels of education and the unemployed have much lower levels of awareness than other demographic groups (11.5% and 1.5%, respectively). Among non-users of smokeless tobacco, the disparities are not wide. The overall awareness level is 23.9%, which is similar for men and women. Awareness level in the 65+ year age group is 15.4%, and for the 25–44 years age group it is 26.2%. Among those with less than primary level of education 17.9% have this belief while among those with college or university level education it is 36.6%. Here again, the unemployed have the least belief that use of smokeless tobacco is harmful (19.4%).

## **9.2. Beliefs about health effects of second-hand smoke**

Table 9.2 presents the percentage of adults who believe that breathing other people's smoke causes serious illness in non-smokers. Overall, 73.7% of people aged 15 years and above believe that breathing other people's smoke can cause serious illness in non-smokers. An equal percentage of men and women believe this; however, more people in urban areas believe this than people in rural areas (79.5% and 67.8%, respectively). A larger percentage of people in the younger age groups (15–24 years and 25–44 years) believe this (approximately 80.0%) than those in the older age groups (45–64 years and 65+ years (64.4% and 43.9%, respectively). People with a higher level of education (high school, college and university levels) believe this more than people with less education (less than primary and primary levels).

Among current smokers and non-smokers, a higher percentage of non-smokers than current smokers across all demographic groups believe that breathing other people's smoke causes serious illness in non-smokers. In both these categories, the younger age groups have greater levels of awareness than the older age groups, and urban people are more aware than rural people. By educational level, in both these groups, those with less than primary education have less than 50.0% awareness, whereas college and university graduates average around 90%.

**Figure. 9.1.** Beliefs about health effects of smoking and second-hand smoke, by gender and age group – GATS Indonesia, 2011



*Note:* All figures are in percentages.



**Table 9.1:** 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 – GATS Indonesia, 2011.

Demographic Characteristics	Adults who believe that smoking causes...			
	Serious illness	Stroke	Heart attack	Lung cancer
	<i>Percentage(95% CI)</i>			
<b>Overall</b>	86.0 (83.4, 88.2)	45.5 (41.3, 49.8)	81.5 (78.4, 84.2)	84.7 (82.2, 86.9)
<b>Gender</b>				
Male	85.7 (82.8, 88.1)	46.6 (42.0, 51.2)	82.9 (79.9, 85.6)	85.2 (82.6, 87.4)
Female	86.3 (83.4, 88.7)	44.4 (40.1, 48.8)	80.0 (76.4, 83.1)	84.2 (81.3, 86.8)
<b>Age (years)</b>				
15-24	93.0 (90.6, 94.8)	50.1 (44.8, 55.4)	91.1 (88.2, 93.3)	92.4 (90.2, 94.2)
25-44	89.2 (86.7, 91.2)	49.3 (44.8, 53.8)	85.6 (82.6, 88.2)	89.3 (87.1, 91.1)
45-64	80.0 (76.1, 83.5)	39.0 (34.9, 43.4)	72.6 (68.1, 76.6)	76.9 (73.0, 80.4)
65+	61.4 (54.9, 67.5)	27.3 (22.2, 33.1)	51.5 (45.1, 57.9)	55.3 (48.8, 61.7)
<b>Residence</b>				
Urban	88.1 (84.3, 91.1)	55.0 (48.8, 61.1)	85.4 (81.2, 88.9)	87.2 (83.6, 90.1)
Rural	83.8 (80.0, 87.0)	35.9 (30.4, 41.9)	77.4 (72.8, 81.5)	82.2 (78.6, 85.2)
<b>Education Level</b>				
Less than primary school completed	66.7 (61.5, 71.4)	23.2 (19.3, 27.5)	57.8 (52.1, 63.3)	63.1 (58.0, 67.9)
Primary school completed	85.7 (82.4, 88.4)	36.8 (31.9, 42.0)	80.4 (76.4, 83.9)	83.7 (80.5, 86.5)
Secondary school completed	93.8 (91.8, 95.4)	50.3 (45.4, 55.1)	90.3 (87.2, 92.7)	93.3 (91.1, 94.9)
High school completed	95.1 (93.3, 96.4)	64.0 (59.3, 68.5)	93.3 (91.3, 94.9)	95.6 (94.2, 96.7)
College or University +	95.4 (92.3, 97.2)	75.3 (68.9, 80.7)	94.8 (91.7, 96.8)	95.6 (92.3, 97.6)
<b>Occupation/Work status</b>				
Employed	89.2 (86.5, 91.5)	50.8 (45.6, 56.0)	85.3 (81.5, 88.5)	88.6 (85.9, 90.9)
Self-employed	82.2 (77.9, 85.8)	38.3 (32.3, 44.5)	77.4 (72.6, 81.7)	81.1 (77.4, 84.4)
Students	97.0 (94.9, 98.2)	61.5 (55.2, 67.4)	95.5 (91.5, 97.6)	95.7 (92.6, 97.6)
Home makers	86.7 (82.8, 89.9)	44.6 (39.7, 49.6)	79.9 (75.2, 83.9)	83.6 (79.7, 86.9)
Un-employed	77.5 (72.3, 82.0)	43.7 (36.6, 51.1)	74.8 (68.9, 79.9)	77.5 (72.0, 82.3)

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

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

**Table 9.1 (cont):** 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 – GATS Indonesia, 2011.

Demographic Characteristics	Adults who believe that smoking causes...			
	Serious illness	Stroke	Heart attack	Lung cancer
	<i>Percentage(95% CI)</i>			
<b>Current smokers<sup>1</sup></b>	81.3 (77.8, 84.5)	40.0 (35.3, 45.0)	78.3 (74.5, 81.6)	81.0 (77.8, 83.9)
<b>Gender</b>				
Male	81.7 (78.1, 84.8)	40.4 (35.6, 45.4)	78.7 (74.9, 82.1)	81.4 (78.2, 84.3)
Female	73.2 (64.1, 80.8)	29.7 (20.3, 41.1)	67.9 (55.8, 77.9)	70.8 (60.1, 79.7)
<b>Age (years)</b>				
15-24	87.3 (82.5, 90.9)	37.3 (30.6, 44.7)	86.3 (81.5, 90.0)	88.1 (83.5, 91.6)
25-44	85.5 (82.0, 88.5)	44.5 (39.3, 50.0)	83.4 (79.5, 86.7)	86.3 (83.2, 89.0)
45-64	74.8 (69.6, 79.4)	36.8 (31.4, 42.5)	70.1 (64.7, 75.0)	72.8 (68.2, 77.0)
65+	59.6 (51.0, 67.7)	26.3 (19.1, 35.1)	50.6 (42.6, 58.5)	54.5 (45.7, 63.1)
<b>Residence</b>				
Urban	83.6 (78.9, 87.5)	48.7 (41.9, 55.5)	82.5 (77.7, 86.5)	84.3 (80.0, 87.8)
Rural	79.4 (74.0, 83.9)	32.6 (26.1, 39.9)	74.7 (68.9, 79.7)	78.3 (73.4, 82.4)
<b>Education Level</b>				
Less than primary school completed	64.4 (58.0, 70.4)	22.0 (17.3, 27.4)	57.6 (50.4, 64.4)	62.5 (56.1, 68.4)
Primary school completed	81.2 (75.8, 85.6)	33.7 (28.1, 39.9)	78.6 (72.9, 83.4)	79.2 (73.8, 83.6)
Secondary school completed	88.8 (84.7, 91.8)	43.4 (36.9, 50.1)	85.5 (80.6, 89.3)	90.3 (86.5, 93.1)
High school completed	91.7 (88.7, 93.9)	57.7 (51.5, 63.8)	90.5 (87.2, 93.1)	92.5 (89.7, 94.7)
College or University +	88.3 (79.5, 93.6)	68.9 (58.5, 77.7)	92.3 (86.9, 95.6)	93.1 (87.1, 96.4)
<b>Occupation/Work status</b>				
Employed	85.6 (81.6, 88.9)	45.1 (39.0, 51.4)	82.1 (77.1, 86.3)	85.9 (81.8, 89.1)
Self-employed	78.8 (73.7, 83.2)	35.6 (29.7, 42.0)	75.7 (70.4, 80.3)	77.6 (72.8, 81.7)
Students	92.0 (82.6, 96.6)	46.9 (33.6, 60.8)	93.3 (83.1, 97.5)	96.5 (87.8, 99.1)
Home makers	83.3 (73.0, 90.1)	39.6 (25.2, 56.2)	77.3 (62.1, 87.5)	75.4 (61.5, 85.5)
Un-employed	70.7 (62.5, 77.7)	40.3 (30.5, 50.8)	68.9 (59.1, 77.3)	73.5 (64.5, 80.9)

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

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

**Table 9.1 (cont):** 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 – GATS Indonesia, 2011.

Demographic Characteristics	Adults who believe that smoking causes...			
	Serious illness	Stroke	Heart attack	Lung cancer
	<i>Percentage(95% CI)</i>			
<b>Non-smokers<sup>2</sup></b>	88.5 (86.0, 90.5)	48.4 (44.1, 52.8)	83.1 (80.0, 85.8)	86.7 (84.1, 88.8)
<b>Gender</b>				
Male	93.9 (91.9, 95.4)	59.2 (54.1, 64.1)	91.6 (89.1, 93.5)	92.8 (90.7, 94.4)
Female	86.6 (83.7, 89.1)	44.8 (40.5, 49.2)	80.3 (76.7, 83.5)	84.6 (81.6, 87.2)
<b>Age (years)</b>				
15-24	95.0 (92.9, 96.5)	54.6 (48.9, 60.2)	92.8 (89.8, 94.9)	93.9 (91.6, 95.7)
25-44	91.4 (88.9, 93.4)	52.1 (47.4, 56.8)	87.0 (83.8, 89.7)	91.0 (88.8, 92.8)
45-64	83.4 (79.7, 86.6)	40.5 (36.3, 44.8)	74.2 (69.4, 78.5)	79.6 (75.3, 83.3)
65+	62.2 (54.7, 69.1)	27.8 (21.8, 34.7)	51.9 (44.3, 59.5)	55.7 (47.9, 63.1)
<b>Residence</b>				
Urban	90.3 (86.4, 93.1)	58.0 (51.6, 64.1)	86.8 (82.3, 90.3)	88.6 (84.9, 91.5)
Rural	86.5 (83.2, 89.2)	37.9 (32.3, 43.9)	79.1 (74.6, 83.0)	84.5 (81.0, 87.5)
<b>Education Level</b>				
Less than primary school completed	68.0 (62.5, 73.1)	23.9 (19.5, 29.0)	57.9 (51.8, 63.8)	63.5 (57.8, 68.8)
Primary school completed	88.3 (85.5, 90.7)	38.6 (33.3, 44.2)	81.5 (77.5, 85.0)	86.4 (83.4, 88.9)
Secondary school completed	96.2 (94.4, 97.5)	53.5 (48.1, 58.8)	92.5 (89.4, 94.8)	94.7 (92.2, 96.4)
High school completed	96.8 (95.0, 97.9)	67.2 (62.3, 71.8)	94.8 (92.6, 96.4)	97.2 (95.6, 98.2)
College or University +	98.1 (96.0, 99.1)	77.7 (70.9, 83.3)	95.8 (92.3, 97.7)	96.6 (92.8, 98.4)
<b>Occupation/Work status</b>				
Employed	92.4 (90.0, 94.3)	55.9 (49.9, 61.6)	88.1 (84.4, 91.0)	91.1 (88.3, 93.3)
Self-employed	85.6 (81.2, 89.1)	40.9 (34.2, 48.0)	79.2 (74.0, 83.6)	84.7 (80.9, 88.0)
Students	97.8 (95.7, 98.9)	63.9 (57.5, 69.9)	95.8 (91.9, 97.9)	95.6 (91.9, 97.7)
Home makers	86.8 (82.8, 90.0)	44.7 (39.7, 49.8)	79.9 (75.1, 84.0)	83.9 (79.8, 87.2)
Un-employed	80.7 (74.9, 85.4)	45.3 (37.6, 53.3)	77.6 (70.9, 83.1)	79.4 (72.5, 85.0)

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

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

**Table 9.1A:** Percentage of adults ≥15 years old who believe that smoking causes COPD, bladder cancer, stomach cancer, premature birth, or bone loss, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Adults who believe that smoking causes...				
	COPD <sup>†</sup>	Bladder Cancer	Stomach Cancer <i>Percentage(95% CI)</i>	Premature Birth	Bone Loss
<b>Overall</b>	36.0 (30.2, 42.4)	27.7 (24.6, 31.1)	18.5 (15.9, 21.4)	49.5 (45.4, 53.6)	20.4 (17.4, 23.7)
<b>Gender</b>					
Male	37.4 (31.4, 43.9)	27.3 (23.9, 30.9)	19.2 (16.3, 22.4)	48.4 (43.9, 52.9)	20.0 (16.7, 23.7)
Female	34.7 (28.8, 41.1)	28.2 (24.8, 31.8)	17.7 (15.1, 20.7)	50.6 (46.3, 55.0)	20.8 (17.8, 24.2)
<b>Age (years)</b>					
15-24	40.2 (33.3, 47.5)	33.7 (28.7, 39.0)	19.3 (15.4, 23.9)	57.3 (51.9, 62.4)	21.4 (17.0, 26.6)
25-44	39.5 (33.1, 46.3)	30.7 (27.1, 34.5)	20.9 (18.0, 24.2)	56.1 (51.7, 60.4)	23.5 (20.2, 27.0)
45-64	30.6 (24.9, 37.0)	21.1 (18.3, 24.3)	16.0 (13.4, 18.9)	37.9 (33.5, 42.5)	16.6 (14.2, 19.5)
65+	18.1 (13.2, 24.4)	10.5 (7.7, 14.2)	8.1 (5.9, 11.0)	19.4 (14.8, 25.1)	9.9 (7.3, 13.4)
<b>Residence</b>					
Urban	35.7 (27.3, 45.1)	31.3 (27.1, 35.8)	18.9 (15.9, 22.2)	58.3 (52.6, 63.8)	23.3 (19.4, 27.6)
Rural	36.4 (28.5, 45.1)	24.1 (19.6, 29.4)	18.0 (14.0, 23.0)	40.6 (34.7, 46.8)	17.5 (13.2, 22.8)
<b>Education Level</b>					
Less than primary school completed	18.4 (13.8, 24.2)	11.6 (9.3, 14.4)	10.7 (8.3, 13.6)	21.8 (17.4, 27.0)	10.3 (7.9, 13.4)
Primary school completed	26.4 (20.6, 33.1)	22.7 (18.7, 27.3)	15.5 (12.2, 19.5)	39.6 (35.0, 44.3)	15.5 (12.6, 18.9)
Secondary school completed	39.9 (32.6, 47.6)	33.0 (28.4, 38.0)	19.6 (15.9, 23.8)	57.7 (52.5, 62.7)	24.5 (20.3, 29.2)
High school completed	53.0 (45.4, 60.5)	39.4 (34.9, 44.0)	24.7 (21.0, 28.8)	70.7 (66.3, 74.8)	27.6 (23.2, 32.5)
College or University +	62.8 (52.6, 71.9)	44.3 (37.6, 51.2)	31.0 (25.5, 37.0)	81.5 (77.0, 85.4)	35.7 (28.5, 43.5)
<b>Occupation/Work status</b>					
Employed	43.2 (36.2, 50.4)	31.7 (27.6, 36.1)	20.7 (17.7, 24.0)	58.4 (53.5, 63.2)	23.1 (19.5, 27.2)
Self-employed	33.4 (26.6, 41.1)	24.0 (19.6, 29.1)	18.8 (14.7, 23.8)	40.3 (34.8, 46.0)	18.9 (14.3, 24.6)
Students	43.8 (34.6, 53.5)	36.0 (30.1, 42.3)	20.9 (16.0, 26.8)	61.5 (53.9, 68.6)	26.1 (19.7, 33.7)
Home makers	30.4 (24.5, 37.1)	27.7 (24.0, 31.8)	16.8 (14.1, 19.9)	50.9 (45.5, 56.3)	18.7 (15.8, 22.0)
Un-employed	29.0 (21.7, 37.6)	21.1 (16.3, 26.8)	10.9 (7.9, 14.8)	41.4 (35.0, 48.1)	15.8 (11.8, 20.8)

<sup>1</sup> Includes daily and occasional (less than daily) smokers.<sup>2</sup> Includes former and never smokers.<sup>†</sup> COPD = Chronic Obstructive Pulmonary Disease

**Table 9.1A (cont):** Percentage of adults  $\geq 15$  years old who believe that smoking causes COPD, bladder cancer, stomach cancer, premature birth, or bone loss, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	COPD <sup>†</sup>	Adults who believe that smoking causes...			
		Bladder Cancer	Stomach Cancer <i>Percentage(95% CI)</i>	Premature Birth	Bone Loss
<b>Current smokers<sup>1</sup></b>	32.7 (27.0, 38.9)	22.8 (19.6, 26.4)	16.2 (13.5, 19.2)	42.1 (37.5, 46.8)	16.8 (13.8, 20.2)
<b>Gender</b>					
Male	33.0 (27.3, 39.3)	23.1 (19.9, 26.8)	16.4 (13.8, 19.5)	42.6 (38.0, 47.4)	16.7 (13.8, 20.2)
Female	23.9 (13.8, 38.2)	15.2 (8.5, 25.6)	9.6 (5.4, 16.4)	28.9 (19.5, 40.6)	17.4 (9.3, 30.3)
<b>Age (years)</b>					
15-24	38.5 (30.4, 47.2)	26.8 (20.4, 34.3)	17.4 (11.9, 24.7)	45.0 (36.6, 53.7)	14.4 (9.8, 20.8)
25-44	35.7 (29.6, 42.3)	24.8 (21.0, 29.0)	17.0 (14.0, 20.4)	49.2 (44.4, 54.0)	19.0 (15.7, 22.9)
45-64	26.7 (20.9, 33.5)	20.0 (16.4, 24.2)	16.0 (13.2, 19.2)	34.2 (29.2, 39.6)	15.7 (12.6, 19.5)
65+	18.0 (12.2, 25.7)	8.4 (4.5, 15.3)	7.4 (4.3, 12.4)	12.7 (7.8, 20.0)	10.6 (6.2, 17.5)
<b>Residence</b>					
Urban	32.0 (23.6, 41.8)	25.2 (20.6, 30.4)	15.0 (12.0, 18.7)	49.7 (43.3, 56.2)	20.3 (16.6, 24.7)
Rural	33.3 (26.0, 41.4)	20.8 (16.4, 26.1)	17.2 (13.2, 22.0)	35.6 (29.3, 42.5)	13.7 (9.6, 19.3)
<b>Education Level</b>					
Less than primary school completed	18.3 (13.3, 24.8)	10.2 (7.4, 14.0)	10.7 (8.0, 14.2)	18.9 (13.9, 25.1)	9.9 (6.9, 14.0)
Primary school completed	25.4 (19.5, 32.4)	21.2 (16.3, 27.1)	15.0 (11.4, 19.4)	34.1 (28.7, 39.9)	11.7 (8.8, 15.3)
Secondary school completed	36.7 (29.3, 44.8)	24.5 (19.8, 30.0)	16.7 (12.6, 21.9)	51.1 (44.5, 57.7)	19.2 (14.6, 24.7)
High school completed	49.7 (40.9, 58.4)	33.4 (28.0, 39.2)	21.5 (16.5, 27.6)	62.9 (56.1, 69.2)	25.0 (19.3, 31.7)
College or University +	51.3 (38.7, 63.7)	37.7 (27.9, 48.7)	23.1 (14.7, 34.4)	70.8 (61.1, 78.9)	32.1 (22.3, 43.9)
<b>Occupation/Work status</b>					
Employed	37.9 (30.9, 45.4)	25.9 (21.7, 30.7)	17.8 (14.6, 21.6)	50.8 (45.1, 56.5)	20.0 (16.0, 24.7)
Self-employed	29.6 (23.5, 36.5)	21.2 (17.4, 25.6)	16.3 (12.8, 20.5)	36.6 (31.2, 42.4)	15.2 (11.6, 19.6)
Students	44.3 (28.6, 61.3)	24.4 (14.3, 38.5)	17.3 (9.0, 30.7)	50.6 (34.2, 66.9)	14.9 (7.8, 26.8)
Home makers	17.9 (8.1, 35.0)	15.9 (5.8, 36.6)	11.9 (4.5, 28.0)	37.8 (22.9, 55.3)	17.4 (8.2, 33.4)
Un-employed	24.9 (16.2, 36.2)	18.5 (12.4, 26.6)	7.1 (3.4, 14.1)	31.2 (22.7, 41.2)	10.7 (5.8, 18.9)

<sup>1</sup> Includes daily and occasional (less than daily) smokers.<sup>2</sup> Includes former and never smokers.<sup>†</sup> COPD = Chronic Obstructive Pulmonary Disease

**Table 9.1A (cont):** Percentage of adults ≥15 years old who believe that smoking causes COPD, bladder cancer, stomach cancer, premature birth, or bone loss, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	COPD <sup>†</sup>	Adults who believe that smoking causes...			
		Bladder Cancer	Stomach Cancer <i>Percentage(95% CI)</i>	Premature Birth	Bone Loss
<b>Non-smokers<sup>2</sup></b>	37.8 (31.7, 44.4)	30.3 (27.0, 33.9)	19.7 (16.9, 22.8)	53.4 (49.1, 57.7)	22.3 (19.0, 26.0)
<b>Gender</b>					
Male	46.4 (39.1, 53.8)	35.7 (31.1, 40.5)	24.7 (20.7, 29.1)	60.0 (55.0, 64.8)	26.5 (21.5, 32.2)
Female	35.0 (29.0, 41.4)	28.5 (25.1, 32.2)	18.0 (15.3, 21.0)	51.2 (46.8, 55.6)	20.9 (17.8, 24.4)
<b>Age (years)</b>					
15-24	40.8 (33.7, 48.3)	36.1 (31.0, 41.5)	20.0 (16.1, 24.5)	61.6 (56.3, 66.6)	23.9 (19.1, 29.4)
25-44	41.8 (34.9, 49.1)	34.3 (30.3, 38.4)	23.3 (20.0, 27.0)	60.3 (55.5, 64.9)	26.1 (22.6, 30.1)
45-64	33.1 (26.9, 39.9)	21.9 (18.7, 25.4)	16.0 (12.8, 19.8)	40.3 (35.4, 45.5)	17.2 (14.3, 20.7)
65+	18.2 (12.8, 25.1)	11.4 (8.1, 15.9)	8.4 (6.0, 11.6)	22.5 (17.0, 29.2)	9.6 (6.8, 13.5)
<b>Residence</b>					
Urban	37.4 (28.9, 46.9)	34.2 (29.9, 38.7)	20.7 (17.4, 24.4)	62.3 (56.5, 67.8)	24.7 (20.4, 29.5)
Rural	38.3 (29.7, 47.6)	26.1 (21.0, 32.0)	18.6 (14.1, 24.0)	43.7 (37.4, 50.1)	19.8 (15.0, 25.6)
<b>Education Level</b>					
Less than primary school completed	18.5 (13.6, 24.6)	12.4 (9.6, 15.9)	10.7 (8.0, 14.1)	23.7 (18.8, 29.4)	10.6 (7.9, 14.2)
Primary school completed	27.0 (20.9, 34.0)	23.6 (19.3, 28.4)	15.8 (12.3, 20.1)	42.8 (37.8, 48.0)	17.8 (14.4, 21.7)
Secondary school completed	41.3 (33.4, 49.7)	37.0 (31.5, 42.9)	20.9 (16.9, 25.6)	60.8 (54.8, 66.6)	27.0 (22.0, 32.6)
High school completed	54.7 (47.0, 62.1)	42.4 (37.7, 47.3)	26.3 (22.5, 30.4)	74.7 (70.2, 78.8)	28.9 (24.3, 34.0)
College or University +	67.2 (57.1, 75.9)	46.8 (40.0, 53.6)	34.0 (27.3, 41.4)	85.6 (80.6, 89.6)	37.0 (29.8, 44.8)
<b>Occupation/Work status</b>					
Employed	47.8 (40.2, 55.5)	36.7 (32.0, 41.8)	23.2 (19.5, 27.3)	65.1 (59.5, 70.4)	25.8 (21.4, 30.7)
Self-employed	37.4 (29.2, 46.2)	26.9 (20.9, 33.7)	21.4 (16.0, 27.9)	44.0 (37.4, 50.8)	22.7 (16.6, 30.2)
Students	43.7 (34.0, 54.0)	37.9 (32.0, 44.2)	21.5 (16.2, 27.9)	63.3 (55.7, 70.4)	27.9 (20.9, 36.2)
Home makers	30.8 (24.7, 37.5)	28.1 (24.3, 32.1)	16.9 (14.2, 20.0)	51.2 (45.7, 56.7)	18.7 (15.7, 22.1)
Un-employed	30.9 (22.9, 40.2)	22.3 (16.8, 29.0)	12.6 (9.2, 17.2)	46.1 (38.5, 54.0)	18.1 (13.5, 23.9)

<sup>1</sup> Includes daily and occasional (less than daily) smokers.<sup>2</sup> Includes former and never smokers.<sup>†</sup> COPD = Chronic Obstructive Pulmonary Disease

**Table 9.1B:** Percentage of adults ≥15 years old who believe that using smokeless tobacco causes serious illness by the status of smokeless tobacco use and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Smokeless tobacco use causes serious illness...		
	Overall	Among current users <sup>1</sup> Percentage (95% CI)	Among non-users <sup>2</sup>
<b>Overall</b>	23.9 (20.3, 28.1)	24.5 (16.6, 34.6)	23.9 (20.2, 28.1)
<b>Gender</b>			
Male	25.5 (21.6, 29.8)	39.0 (25.1, 55.0)	25.3 (21.4, 29.5)
Female	22.4 (18.6, 26.8)	13.3 (8.0, 21.3)	22.6 (18.8, 27.0)
<b>Age (years)</b>			
15-24	25.0 (20.9, 29.7)	--	24.8 (20.7, 29.4)
25-44	26.3 (22.2, 30.8)	30.5 (17.4, 47.7)	26.2 (22.2, 30.7)
45-64	21.3 (17.4, 25.7)	31.5 (19.0, 47.4)	21.1 (17.2, 25.6)
65+	14.4 (10.2, 20.0)	3.4 (1.0, 10.6)	15.4 (10.8, 21.3)
<b>Residence</b>			
Urban	21.6 (16.9, 27.3)	25.9 (14.7, 41.6)	21.6 (16.8, 27.3)
Rural	26.2 (20.9, 32.4)	23.7 (13.9, 37.4)	26.3 (20.9, 32.5)
<b>Education Level</b>			
Less than primary school completed	17.6 (13.3, 22.9)	11.5 (5.6, 22.1)	17.9 (13.5, 23.3)
Primary school completed	22.7 (18.0, 28.3)	41.1 (24.5, 59.9)	22.6 (17.8, 28.1)
Secondary school completed	24.4 (20.6, 28.6)	--	24.2 (20.4, 28.4)
High school completed	27.4 (22.7, 32.6)	--	27.2 (22.6, 32.4)
College or University +	36.5 (28.1, 45.9)	--	36.6 (28.1, 46.0)
<b>Occupation/Work status</b>			
Employed	25.4 (21.2, 30.0)	28.5 (16.1, 45.3)	25.3 (21.2, 30.0)
Self-employed	24.8 (19.8, 30.7)	29.5 (16.9, 46.2)	24.7 (19.7, 30.6)
Students	27.1 (21.4, 33.6)	--	26.8 (21.2, 33.4)
Home makers	21.2 (17.4, 25.7)	18.8 (10.1, 32.1)	21.3 (17.4, 25.8)
Un-employed	18.9 (13.9, 25.1)	1.5 (0.2, 11.0)	19.4 (14.3, 25.8)

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

<sup>2</sup> Includes former and never smokeless tobacco users.

-- Indicator estimate based on less than 25 un-weighted cases and has been suppressed.

**Table 9.2:** Percentage of adults  $\geq 15$  years old who believe that breathing other people's smoke causes serious illness in non-smokers, by smoking status and selected demographic characteristics – GATS Indonesia, 2011.

Demographic Characteristics	Believe that breathing other people's smoke causes serious illness in non-smokers		
	Overall	Current smokers <sup>1</sup> Percentage(95% CI )	Non-smokers <sup>2</sup>
<b>Overall</b>	73.7 (70.2, 76.9)	67.8 (63.4, 71.9)	76.8 (73.5, 79.8)
<b>Gender</b>			
Male	74.1 (70.4, 77.5)	68.3 (63.9, 72.4)	85.8 (82.9, 88.3)
Female	73.3 (69.5, 76.7)	55.8 (45.0, 66.1)	73.7 (69.9, 77.2)
<b>Age (years)</b>			
15-24	82.8 (79.0, 86.0)	72.7 (66.2, 78.5)	86.4 (82.6, 89.4)
25-44	78.3 (74.8, 81.4)	73.5 (69.0, 77.5)	81.2 (77.8, 84.2)
45-64	64.4 (60.0, 68.6)	60.5 (54.8, 66.0)	66.9 (62.6, 71.0)
65+	43.9 (37.3, 50.7)	40.8 (31.9, 50.4)	45.2 (38.2, 52.5)
<b>Residence</b>			
Urban	79.5 (74.8, 83.6)	75.1 (68.9, 80.3)	81.6 (77.2, 85.4)
Rural	67.8 (62.5, 72.6)	61.6 (55.3, 67.6)	71.5 (66.3, 76.1)
<b>Education Level</b>			
Less than primary school completed	46.4 (41.5, 51.4)	42.6 (36.7, 48.7)	48.7 (43.1, 54.4)
Primary school completed	70.1 (65.6, 74.2)	67.1 (60.6, 72.9)	71.9 (67.2, 76.1)
Secondary school completed	83.0 (79.9, 85.8)	76.1 (70.8, 80.7)	86.2 (83.1, 88.9)
High school completed	89.8 (87.3, 91.8)	83.7 (79.2, 87.3)	92.9 (90.6, 94.6)
College or University +	93.2 (89.3, 95.8)	89.1 (81.3, 93.9)	94.8 (91.4, 96.9)
<b>Occupation/Work status</b>			
Employed	80.3 (76.1, 84.0)	75.0 (69.4, 79.8)	85.0 (80.9, 88.4)
Self-employed	66.6 (61.2, 71.7)	62.8 (57.0, 68.2)	70.5 (64.5, 75.9)
Students	90.4 (86.2, 93.4)	81.2 (63.8, 91.4)	91.9 (88.4, 94.4)
Home makers	73.3 (68.9, 77.3)	67.3 (52.1, 79.6)	73.5 (69.0, 77.5)
Un-employed	63.9 (57.8, 69.6)	58.4 (48.3, 67.8)	66.5 (59.9, 72.5)

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

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



## 10. Conclusion and Recommendations

### 10.1. Conclusion

The GATS uses a global standard tool for systematically monitoring adult tobacco use and for tracking key tobacco control indicators that can be utilized by policy makers to strengthen tobacco control activities in Indonesia. In addition, it allows international comparability and opportunities to exchange experiences and to learn lessons from other countries.

The GATS is the first ever nationwide survey that provides comprehensive information on various kinds of tobacco products including smokeless tobacco, and other key indicators of tobacco control, using a nationally representative sample of persons aged 15 years and above. It provides national estimates for both smoking and smokeless tobacco usage by gender, age group, residence, educational level and occupation. In addition, indicators are also available on various dimensions of tobacco control such as exposure to SHS, anti-tobacco information and tobacco advertisements, and expenditure related to tobacco.

The prevalence of tobacco use as reported in GATS is comparable with findings of other nationally representative surveys conducted earlier in Indonesia, such as the National Health Survey, 2004 and the Baseline Health Research of 2007 and 2010.

### 10.2. Recommendations

The results from the GATS provide recent information on tobacco use (both smoked and smokeless) and new information on key indicators related to a package of six policies known as MPOWER; these will help in monitoring and evaluating tobacco control policies and programmes. Major policy recommendations aimed at developing, tracking and implementing more effective tobacco control interventions specifically under WHO's MPOWER guidelines are discussed below.

#### **M: Monitor**

The GATS has provided national representative data on the use of both smoked and smokeless tobacco among the adult population for the year 2011. To effectively monitor tobacco use and the tobacco control programme in Indonesia, regular surveillance of key indicators is necessary.

Strategic activities should include the following:

- Periodic implementation of national surveys using standard GTSS protocol, such as a repeat GATS
- Strengthening of the National Tobacco Control surveillance system by integrating standard "tobacco questions for surveys" (TQS) in ongoing national surveys such as SUSENAS and national family health surveys
- Dissemination of the GATS data to multiple stakeholders for advocacy of tobacco control with a view to implementing the MPOWER policy package as envisaged in the 61st Regional Committee resolution
- Social networking and collaboration among tobacco control experts from various institutions and among tobacco control stakeholders to strengthen the tobacco surveillance system
- Consultation and advocacy with national agencies for technical and financial support to regularly administer surveys under the GTSS
- Strengthening the channel of coordination between local tobacco control networks and the nationwide tobacco control surveillance system
- Applying information technology to establish an efficient and effective tobacco surveillance system.

## **P: Protect**

The GATS has shown that a large percentage of people are exposed to SHS in the workplace, in public places and at home. The community as a whole, and especially vulnerable groups such as women and children should be protected from tobacco smoke by the following measures:

- Advocate for 100% smoke-free regulation in public places at the national and subnational levels to protect the community from exposure to tobacco smoke.
- Enforce smoke-free regulation actively and effectively.
- Enhance public awareness using various media campaigns on the harm caused by SHS, and the right of non-smokers to be free from exposure to tobacco smoke.
- Formulate both formal and informal education curricula to enhance knowledge and develop proper attitudes and perceptions among the populace about the harm caused by the use of tobacco and SHS.

## **O: Offer help**

Many smokers have made a quit attempt in the past 12 months, or have planned to quit. Many smokers have also been advised to quit by health-care providers. To help such people, the following actions should be taken:

- Establish quit-line centres and smoking cessation centres across the entire country to provide counselling/psychobehavioural therapy, as well as NRT, as needed.
- Conduct widespread publicity campaigns and public health education regarding the harm of smoking and SHS.
- Develop counselling skills among health-care providers (public and private) on tobacco cessation services as part of routine health services.
- Provide formal training to students of health professions.
- Integrate tobacco cessation services in primary health-care settings.

## **W: Warn**

The GATS has shown that the existing warning messages have a limited reach since they are currently in a textual form and presented in tiny words. These warnings, coupled with public education, can be more effective and have a better impact by taking the following measures:

- Use effective pictorial health warnings on all types of cigarette packages, and on all kinds of tobacco products, including imported tobacco products.
- Disseminate information on the health and economic impact of smoking and exposure to SHS.
- Formulate policies to ban smuggling/import of tobacco products without health warnings preferably pictorial ones.

## **E: Enforce**

Exposure to tobacco advertisements and promotion of tobacco products have been reported to be very high in the GATS. There is hence a need to formulate effective bans on tobacco advertising, promotion and sponsorship at the national and subnational levels, and enforce the same by taking the following measures:

- Raise social awareness on the harm caused by tobacco, and expose the motives of the tobacco industry for their tobacco promotion activities.
- Coordinate tobacco control activities with government and nongovernmental organizations for the systematic monitoring of advertising by the tobacco industry at every level, especially in remote and isolated areas.
- Complete ban advertising, promotion and sponsorship by the tobacco industry Enforce laws and regulations rigorously at all governmental levels .
- Increase the capacity of call centres dealing with complaints on violation of tobacco control regulations, and provide an effective response system.

#### **R: Raise taxes on tobacco**

As increasing the excise tax on all tobacco products has been referred to as one of the most effective ways of discouraging youth from starting to smoke, reduce the use of tobacco by the community. also In addition, to prevent morbidity and premature mortality, the following measures are recommended:

- Conduct advocacy for raising taxes on cigarettes and other tobacco products, taking into account inflation and rising per capita income in Indonesia.
- Increase the level of public concern regarding illicit cigarettes (locally produced).
- Enhance advocacy for better political commitment of the government and members of parliament to regularly revise and increase taxes on cigarettes and other tobacco products.
- Find innovative ways to control evasion of tax.

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## Appendix A: Estimates of Sampling Errors

The estimates from a sample survey are affected by two types of errors: (1) non-sampling errors, and (2) sampling errors. *Non-sampling errors* are the result of errors or mistakes that cannot be attributed to sampling and are made during data collection and data processing, such as errors in coverage, response errors, non-response errors, faulty questionnaires, interviewer recording errors, data processing errors, etc. Although numerous efforts were made during the implementation of the GATS to minimize these errors, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

The sample of respondents selected in the GATS was only one of the samples that could have been selected from the same population, using the same design and sample size. Each of these samples would yield results that differed somewhat from the results of the actual sample selected. *Sampling errors* are a measure of the variability between all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented for each of the selected indicators:

**Value (R):** Weighted prevalence estimate of the indicator

**Standard error (SE):** Sampling errors are usually measured in terms of standard errors for a particular estimate or indicator (R). Standard error of an estimate is thus simply the square root of the variance of that estimate, and is computed in the same units as the estimate.

**Sample size (N):** The total number of observations used to calculate the prevalence estimate (R)

**Design effect:** *Design effect* denoted by “deff” is the ratio of the actual variance of an indicator under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect, denoted by “deft”, is used to show the efficiency of the sample design and is calculated for each estimate as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a DEFT value above 1.0 indicates an increase in the standard error due to the use of a more complex sample design. In general, for a well-designed survey, DEFT usually ranges from 1 to 3. It is common, however, for DEFT to be much larger, up to 7 or 8.

**Relative standard error (RSE):** Relative standard error, also known as coefficient of variation (CV), is the ratio of the standard error to the value of the indicator.

**Margin of error (MOE):** Margin of error is computed as the product of the desired confidence measure and the standard error of the estimate. The level of confidence is usually based on a value (Z) of the standard normal distribution. For example, for a 95% level of confidence, we can use  $Z=1.96$ .

**Confidence limits ( $R \pm 1.96 SE$ ):** Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error of the statistic in 95% of all possible samples of identical size and design.

### Calculation of standard error

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulae for calculating sampling errors. However, the GATS 2011 sample is the result of a multistage stratified design and, consequently, it was necessary to use more complex formulae. For the calculation of sampling errors from the GATS 2011 data, SPSS version 18 was used. The Taylor linearization method of variance estimation was used for survey estimates that were means or proportions.

The Taylor linearization method treats any percentage or average as a ratio estimate,  $r = y/x$ , where  $y$  represents the total sample value for variable  $y$ , and  $x$  represents the total number of cases in the group or subgroup under consideration. The variance of  $r$  is computed using the formula given below:

$$SE^2(r) = \text{var}(r) = \frac{1-f}{x^2} \sum_{h=1}^2 \left[ \frac{m_h}{m_h - 1} \left( \sum_{i=1}^{m_h} Z_{hi}^2 - \frac{Z_h^2}{m_h} \right) \right]$$

in which  $Z_{hi} = y_{hi} - rx_{hi}$ , and  $Z_h = y_h - rx_h$

where  $h$  (=1 or 2) represents the stratum which is urban or rural,

$m_h$  is the total number of PSUs selected in the  $h$ th stratum,

$y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i$ th PSU in the  $h$ th stratum,

$x_{hi}$  is the sum of the weighted number of cases in the  $i$ th PSU in the  $h$ th stratum, and

$f$  is the overall sampling fraction, which is so small that it is ignored.

The results are presented in this appendix for the country as a whole, for urban and rural areas, and by gender. For each variable or indicator, the type of statistic (mean, proportion or rate) and the base population are given in **Table A.1**. In addition to the standard error (SE) described above, **Tables A.2 to A.6** include the value of the estimate (R), the sample size, the design effect (DEFF or DEFT), the relative standard error (SE/R), margin of error (MOE) and the 95% confidence limits ( $R \pm 1.96$  SE) for each variable or indicator.

**Table A.1: List of Indicators for Sampling Errors, GATS Indonesia, 2011**

Indicator	Estimate	Base Population
Current Tobacco Users	Proportion	Adults ≥ 15 years old
Current Tobacco Smokers	Proportion	Adults ≥ 15 years old
Current Cigarette Smokers	Proportion	Adults ≥ 15 years old
Current White Cigarette Smokers	Proportion	Adults ≥ 15 years old
Current Hand-rolled Cigarette Smokers	Proportion	Adults ≥ 15 years old
Current Kretek Cigarette Smokers	Proportion	Adults ≥ 15 years old
Current Users of Smokeless Tobacco	Proportion	Adults ≥ 15 years old
Daily Tobacco Users	Proportion	Adults ≥ 15 years old
Daily Tobacco Smoker	Proportion	Adults ≥ 15 years old
Daily Cigarette Smokers	Proportion	Adults ≥ 15 years old
Daily White Cigarette Smokers	Proportion	Adults ≥ 15 years old
Daily Hand-rolled Cigarette Smokers	Proportion	Adults ≥ 15 years old
Daily Kretek Cigarette Smokers	Proportion	Adults ≥ 15 years old
Daily Users of Smokeless Tobacco	Proportion	Adults ≥ 15 years old
Former Daily Tobacco Smokers Among All Adults	Proportion	Adults ≥ 15 years old
Former Tobacco Smokers Among Ever Daily Smokers	Proportion	Ever daily tobacco smokers ≥ 15 years old
Time to First Tobacco use within 5 minutes of waking	Proportion	Daily tobacco users ≥ 15 years old
Time to First Tobacco use within 6-30 minutes of waking	Proportion	Daily tobacco users ≥ 15 years old
Smoking Quit Attempt in the Past 12 Months	Proportion	Current smokers and former smokers who have been abstinent for less than 12 months
Health Care Provider Asked about Smoking	Proportion	Current smokers and former smokers who have been abstinent for less than 12 months and who visited a HCP during the past 12 months
Health Care Provider Advised Quitting Smoking	Proportion	Current smokers and former smokers who have been abstinent for less than 12 months and who visited a HCP during the past 12 months
Use of Counseling/Advice or Quit Lines for Smoking Cessation	Proportion	Current smokers and former smokers who have been abstinent for less than 12 months
Planning to quit, thinking about quitting, or will quit smoking	Proportion	Current smokers ≥ 15 years old
Exposure to SHS at Home	Proportion	Adults ≥ 15 years old
Exposure to SHS at Workplace	Proportion	Adults who work indoors
Exposure to SHS in Government Buildings/Offices	Proportion	Adults ≥ 15 years old who have visited in past 30 days
Exposure to SHS in Health Care Facilities	Proportion	Adults ≥ 15 years old who have visited in past 30 days
Exposure to SHS in Restaurants	Proportion	Adults ≥ 15 years old who have visited in past 30 days
Exposure to SHS in Public Transportation	Proportion	Adults ≥ 15 years old who have visited in past 30 days
Last kretek purchase in store	Proportion	Current manufactured cigarette smokers ≥ 15 years old
Last kretek purchase at kiosk	Proportion	Current manufactured cigarette smokers ≥ 15 years old
Noticed Anti-tobacco Information on radio or television	Proportion	Adults ≥ 15 years old
Noticed Health Warning Labels on Cigarette Packages	Proportion	Current smokers ≥ 15 years old
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	Proportion	Current smokers ≥ 15 years old
Noticed Any Cigarette Advertisement or Promotion	Proportion	Adults ≥ 15 years old
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Serious Illness	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Strokes	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Heart Attacks	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Lung Cancer	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	Proportion	Adults ≥ 15 years old
Believes that Tobacco Smoking Causes Premature Birth	Proportion	Adults ≥ 15 years old
Believes that Using Smokeless Tobacco Causes Serious Illness	Proportion	Adults ≥ 15 years old
Believes that SHS Causes Serious Illness in Non-Smokers	Proportion	Adults ≥ 15 years old
Number of Cigarettes Smoked per Day (by daily smokers)	Mean	Current daily cigarette smokers ≥ 15 years old
Time since Quitting Smoking (in years)	Mean	Former smokers ≥ 15 years old
Average Amount Spent on 20 Kretek Cigarettes	Mean	Current Kretek cigarette smokers ≥ 15 years old
Monthly Expenditures on Kretek Cigarettes	Mean	Current Kretek cigarette smokers ≥ 15 years old
Age at Daily Smoking Initiation Among Adults Age 20-34	Mean	Ever daily smokers ≥ 15 years old



Table A.2: Sampling Errors - Overall, GATS Indonesia, 2011

Indicator	Estimate (R)	Standard Error (SE)	Sample size (n)	Design Effect (DEFT)	Relative Error (SE/R)	Margin of Error (MOE)	Confidence limits	
							Lower Limit (R-1.96SE)	Upper Limit (R+1.96SE)
Current Tobacco Users	0.361	0.009	8227	2.632	0.024	0.017	0.344	0.378
Current Tobacco Smokers	0.348	0.008	8305	2.4	0.023	0.016	0.332	0.364
Current Cigarette Smokers	0.348	0.008	8305	2.4	0.023	0.016	0.332	0.364
Current White Cigarette Smokers	0.022	0.003	8305	4.338	0.153	0.007	0.015	0.029
Current Hand-rolled Cigarette Smokers	0.047	0.007	8305	8.436	0.143	0.013	0.034	0.061
Current Kretek Cigarette Smokers	0.315	0.009	8305	3.029	0.028	0.017	0.298	0.333
Current Users of Smokeless Tobacco	0.017	0.002	8176	1.907	0.115	0.004	0.013	0.021
Daily Tobacco Users	0.298	0.008	8305	2.862	0.028	0.017	0.282	0.315
Daily Tobacco Smoker	0.292	0.008	8305	2.782	0.028	0.016	0.276	0.309
Daily Cigarette Smokers	0.292	0.008	8305	2.774	0.028	0.016	0.276	0.308
Daily White Cigarette Smokers	0.016	0.002	8305	3.318	0.158	0.005	0.011	0.021
Daily Hand-rolled Cigarette Smokers	0.038	0.006	8305	7.148	0.148	0.011	0.027	0.049
Daily Kretek Cigarette Smokers	0.259	0.009	8305	3.247	0.033	0.017	0.242	0.276
Daily Users of Smokeless Tobacco	0.012	0.001	8176	1.454	0.122	0.003	0.009	0.015
Former Daily Tobacco Smokers Among All Adults	0.033	0.003	8305	2.135	0.087	0.006	0.027	0.039
Former Tobacco Smokers Among Ever Daily Smokers	0.095	0.008	2880	2.37	0.088	0.017	0.079	0.112
Time to First Tobacco use within 5 minutes of waking	0.068	0.01	2422	4.09	0.153	0.02	0.047	0.088
Time to First Tobacco use within 6-30 minutes of waking	0.315	0.023	2422	6.004	0.073	0.045	0.27	0.361
Smoking Quit Attempt in the Past 12 Months	0.304	0.019	2909	4.814	0.062	0.037	0.267	0.341
Health Care Provider Asked about Smoking	0.405	0.03	913	3.493	0.075	0.06	0.345	0.464
Health Care Provider Advised Quitting Smoking	0.346	0.028	913	3.263	0.082	0.056	0.29	0.402
Use of Counseling/Advice or Quit Lines for Smoking Cessation	0.07	0.018	877	4.483	0.261	0.036	0.034	0.106
Planning to quit, thinking about quitting, or will quit smoking	0.488	0.029	2851	9.497	0.059	0.057	0.431	0.545
Exposure to SHS at Home	0.784	0.016	8177	12.469	0.02	0.031	0.753	0.816
Exposure to SHS at Workplace	0.513	0.028	1317	4.016	0.054	0.054	0.459	0.567
Exposure to SHS in Government Buildings/Offices Among Those Who Visited	0.634	0.024	1538	3.913	0.038	0.048	0.587	0.682
Exposure to SHS in Health Care Facilities Among Those Who Visited	0.179	0.015	2656	4.234	0.086	0.03	0.149	0.209
Exposure to SHS in Restaurants Among Those Who Visited	0.854	0.02	2378	7.715	0.024	0.039	0.814	0.893
Exposure to SHS on Public Transportation Among Those Who Visited	0.7	0.021	2497	5.305	0.03	0.041	0.658	0.741
Last kretek purchase in store	0.176	0.032	2494	17.114	0.18	0.062	0.114	0.237
Last kretek purchase at kiosk	0.798	0.033	2494	17.093	0.042	0.065	0.733	0.863
Noticed Anti-tobacco Information on radio or television	0.409	0.02	8301	14.028	0.049	0.04	0.37	0.449
Noticed Health Warning Labels on Cigarette Packages	0.722	0.023	2855	7.714	0.032	0.046	0.676	0.768
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	0.271	0.019	2853	5.065	0.069	0.037	0.234	0.307
Noticed Any Cigarette Advertisement or Promotion	0.846	0.012	8292	8.731	0.014	0.023	0.823	0.869
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	0.456	0.025	8301	20.733	0.055	0.049	0.407	0.505
Believes that Tobacco Smoking Causes Serious Illness	0.86	0.012	8305	10.375	0.014	0.024	0.836	0.884
Believes that Tobacco Smoking Causes Strokes	0.455	0.022	8303	15.489	0.047	0.042	0.413	0.497
Believes that Tobacco Smoking Causes Heart Attacks	0.815	0.015	8303	11.782	0.018	0.029	0.786	0.843
Believes that Tobacco Smoking Causes Lung Cancer	0.847	0.012	8305	8.8	0.014	0.023	0.824	0.87
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	0.36	0.031	8304	34.53	0.086	0.061	0.3	0.421
Believes that Tobacco Smoking Causes Premature Birth	0.495	0.021	8305	14.501	0.042	0.041	0.454	0.536
Believes that Using Smokeless Tobacco Causes Serious Illness	0.24	0.02	8304	17.828	0.083	0.039	0.201	0.279
Believes that SHS Causes Serious Illness in Non-Smokers	0.737	0.017	8301	12.1	0.023	0.033	0.704	0.77
Number of Cigarettes Smoked per Day (by daily smokers)	12.828	0.325	2422	3.229	0.025	0.638	12.191	13.466
Time since Quitting Smoking (in years)	9.622	0.593	282	1.367	0.062	1.162	8.46	10.784
Average Amount Spent on 20 Kretek Cigarettes	12718.909	300.992	2476	3.419	0.024	589.944	12128.965	13308.852
Monthly Expenditures on Kretek Cigarettes	198537.27	7271381	2476	2.69	0.037	1425191	184285.362	212789.176
Age at Daily Smoking Initiation Among Adults Age 20-34	17.606	0.162	861	2.159	0.009	0.318	17.288	17.924

Table A.3: Sampling Errors - Male, GATS Indonesia, 2011

Indicator	Estimate (R)	Standard Error (SE)	Sample size (n)	Design Effect (DEFT)	Relative Error (SE/R)	Margin of Error (MOE)	Confidence limits	
							Lower Limit (R-1.96SE)	Upper Limit (R+1.96SE)
Current Tobacco Users	0.674	0.013	3931	2.953	0.019	0.025	0.649	0.699
Current Tobacco Smokers	0.67	0.013	3948	2.949	0.019	0.025	0.645	0.696
Current Cigarette Smokers	0.67	0.013	3948	2.947	0.019	0.025	0.645	0.695
Current White Cigarette Smokers	0.043	0.007	3948	4.165	0.154	0.013	0.03	0.056
Current Hand-rolled Cigarette Smokers	0.09	0.013	3948	8.268	0.146	0.026	0.064	0.116
Current Kretek Cigarette Smokers	0.609	0.015	3948	3.689	0.025	0.029	0.58	0.638
Current Users of Smokeless Tobacco	0.015	0.003	3882	2	0.183	0.005	0.01	0.021
Daily Tobacco Users	0.568	0.015	3948	3.438	0.026	0.029	0.539	0.596
Daily Tobacco Smoker	0.567	0.015	3948	3.47	0.026	0.029	0.539	0.596
Daily Cigarette Smokers	0.567	0.015	3948	3.437	0.026	0.029	0.538	0.595
Daily White Cigarette Smokers	0.031	0.005	3948	3.134	0.158	0.01	0.021	0.04
Daily Hand-rolled Cigarette Smokers	0.072	0.011	3948	6.876	0.15	0.021	0.051	0.093
Daily Kretek Cigarette Smokers	0.503	0.016	3948	3.949	0.031	0.031	0.472	0.534
Daily Users of Smokeless Tobacco	0.011	0.002	3882	1521	0.188	0.004	0.007	0.015
Former Daily Tobacco Smokers Among All Adults	0.06	0.005	3948	2.024	0.09	0.011	0.049	0.07
Former Tobacco Smokers Among Ever Daily Smokers	0.09	0.008	2750	2.239	0.091	0.016	0.074	0.106
Time to First Tobacco use within 5 minutes of waking	0.067	0.01	2332	3.859	0.152	0.02	0.047	0.086
Time to First Tobacco use within 6-30 minutes of waking	0.319	0.023	2332	5.777	0.073	0.045	0.274	0.365
Smoking Quit Attempt in the Past 12 Months	0.298	0.019	2765	4.678	0.063	0.037	0.261	0.335
Health Care Provider Asked about Smoking	0.416	0.031	858	3.313	0.074	0.06	0.356	0.477
Health Care Provider Advised Quitting Smoking	0.357	0.029	858	3.033	0.08	0.056	0.301	0.413
Use of Counseling/Advice or Quit Lines for Smoking Cessation	0.066	0.017	813	3.734	0.254	0.033	0.033	0.099
Planning to quit, thinking about quitting, or will quit smoking	0.489	0.029	2716	9.225	0.06	0.057	0.432	0.546
Exposure to SHS at Home	0.814	0.016	3899	6.39	0.019	0.031	0.783	0.845
Exposure to SHS at Workplace	0.58	0.032	778	3.245	0.055	0.063	0.517	0.642
Exposure to SHS in Government Buildings/Offices Among Those Who Visited	0.694	0.031	859	3.788	0.044	0.06	0.634	0.754
Exposure to SHS in Health Care Facilities Among Those Who Visited	0.201	0.021	988	2.83	0.107	0.042	0.159	0.243
Exposure to SHS in Restaurants Among Those Who Visited	0.908	0.015	1467	4.128	0.017	0.03	0.878	0.938
Exposure to SHS on Public Transportation Among Those Who Visited	0.79	0.02	1088	2.718	0.026	0.04	0.75	0.83
Last kretek purchase in store	0.174	0.031	2391	16.04	0.178	0.061	0.113	0.235
Last kretek purchase at kiosk	0.799	0.033	2391	16.134	0.041	0.065	0.734	0.863
Noticed Anti-tobacco Information on radio or television	0.435	0.022	3946	8.075	0.052	0.044	0.391	0.479
Noticed Health Warning Labels on Cigarette Packages	0.733	0.024	2720	7.818	0.032	0.047	0.686	0.779
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	0.275	0.019	2718	5.179	0.071	0.038	0.237	0.313
Noticed Any Cigarette Advertisement or Promotion	0.911	0.01	3946	5.079	0.011	0.02	0.891	0.931
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	0.534	0.029	3946	12.953	0.053	0.056	0.478	0.59
Believes that Tobacco Smoking Causes Serious Illness	0.857	0.013	3948	5.678	0.015	0.026	0.831	0.883
Believes that Tobacco Smoking Causes Strokes	0.466	0.023	3947	8.57	0.05	0.046	0.42	0.512
Believes that Tobacco Smoking Causes Heart Attacks	0.829	0.014	3947	5.812	0.017	0.028	0.801	0.858
Believes that Tobacco Smoking Causes Lung Cancer	0.852	0.012	3948	4.45	0.014	0.023	0.828	0.875
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	0.374	0.032	3947	17.074	0.085	0.062	0.312	0.437
Believes that Tobacco Smoking Causes Premature Birth	0.484	0.023	3948	8.191	0.047	0.045	0.439	0.528
Believes that Using Smokeless Tobacco Causes Serious Illness	0.255	0.021	3947	9.015	0.082	0.041	0.215	0.296
Believes that SHS Causes Serious Illness in Non-Smokers	0.741	0.018	3946	6.58	0.024	0.035	0.706	0.776
Number of Cigarettes Smoked per Day (by daily smokers)	12.982	0.332	2332	3.214	0.026	0.651	12.331	13.633
Time since Quitting Smoking (in years)	9.571	0.569	255	1.77	0.059	1.15	8.455	10.686
Average Amount Spent on 20 Kretek Cigarettes	12753.216	303.789	2375	3.315	0.024	595.427	12157.79	13348.643
Monthly Expenditures on Kretek Cigarettes	202083.77	7337.213	2375	2.577	0.036	14380.94	187702.83	216464.705
Age at Daily Smoking Initiation Among Adults Aged 20-34	17.6	0.164	846	2.204	0.009	0.32	17.28	17.921

Table A.4: Sampling Errors - Female, GATS Indonesia, 2011.

Indicator	Estimate (R)	Standard Error (SE)	Sample size (n)	Design Effect (DEFT)	Relative Error (SE/R)	Margin of Error (MOE)	Confidence limits	
							Lower Limit (R-1.96SE)	Upper Limit (R+1.96SE)
Current Tobacco Users	0.045	0.005	4296	2.553	0.112	0.01	0.035	0.055
Current Tobacco Smokers	0.027	0.004	4357	2.318	0.139	0.007	0.019	0.034
Current Cigarette Smokers	0.027	0.004	4357	2.318	0.139	0.007	0.019	0.034
Current White Cigarette Smokers	0.001	0.001	4357	1.792	0.589	0.001	0	0.003
Current Hand-rolled Cigarette Smokers	0.005	0.001	4357	1.688	0.283	0.003	0.002	0.008
Current Kretek Cigarette Smokers	0.023	0.004	4357	2.387	0.152	0.007	0.016	0.03
Current Users of Smokeless Tobacco	0.02	0.003	4294	2.362	0.166	0.006	0.013	0.026
Daily Tobacco Users	0.03	0.003	4357	1.747	0.114	0.007	0.023	0.037
Daily Tobacco Smoker	0.018	0.003	4357	1.722	0.146	0.005	0.013	0.023
Daily Cigarette Smokers	0.018	0.003	4357	1.722	0.146	0.005	0.013	0.023
Daily White Cigarette Smokers	0.001	0.001	4357	2.149	0.733	0.001	0	0.002
Daily Hand-rolled Cigarette Smokers	0.004	0.001	4357	1.738	0.332	0.002	0.001	0.006
Daily Kretek Cigarette Smokers	0.015	0.002	4357	1.676	0.158	0.005	0.011	0.02
Daily Users of Smokeless Tobacco	0.013	0.002	4294	1.728	0.177	0.004	0.008	0.017
Former Daily Tobacco Smokers Among All Adults	0.006	0.002	4357	1.866	0.266	0.003	0.003	0.009
Former Tobacco Smokers Among Ever Daily Smokers	0.232	0.051	130	1.874	0.219	0.1	0.132	0.332
Time to First Tobacco use within 5 minutes of waking	0.101	0.037	90	1.378	0.372	0.073	0.027	0.174
Time to First Tobacco use within 6-30 minutes of waking	0.2	0.053	90	1.579	0.267	0.104	0.095	0.304
Smoking Quit Attempt in the Past 12 Months	0.446	0.045	144	1.192	0.102	0.089	0.357	0.535
Health Care Provider Asked about Smoking	0.179	0.058	55	1.249	0.326	0.114	0.064	0.293
Health Care Provider Advised Quitting Smoking	0.13	0.052	55	1.308	0.403	0.103	0.027	0.233
Use of Counseling/Advice or Quit Lines for Smoking Cessation	0.131	0.062	59	1.931	0.469	0.121	0.01	0.252
Planning to quit, thinking about quitting, or will quit smoking	0.458	0.069	135	2.546	0.15	0.135	0.323	0.592
Exposure to SHS at Home	0.754	0.018	4278	7.592	0.024	0.036	0.719	0.79
Exposure to SHS at Workplace	0.414	0.031	539	2.083	0.074	0.06	0.354	0.474
Exposure to SHS in Government Buildings/Offices Among Those Who Visited	0.554	0.029	679	2.254	0.052	0.056	0.498	0.61
Exposure to SHS in Health Care Facilities Among Those Who Visited	0.165	0.016	1668	2.906	0.094	0.03	0.135	0.196
Exposure to SHS in Restaurants Among Those Who Visited	0.761	0.031	911	4.766	0.041	0.06	0.701	0.822
Exposure to SHS on Public Transportation Among Those Who Visited	0.624	0.028	1409	4.784	0.045	0.055	0.568	0.679
Last kretek purchase in store	0.218	0.066	103	2.607	0.303	0.129	0.089	0.348
Last kretek purchase at kiosk	0.778	0.066	103	2.599	0.085	0.13	0.648	0.908
Noticed Anti-tobacco Information on radio or television	0.384	0.02	4355	7.588	0.053	0.04	0.344	0.424
Noticed Health Warning Labels on Cigarette Packages	0.454	0.067	135	2.439	0.148	0.132	0.322	0.586
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	0.17	0.043	135	1.748	0.253	0.084	0.086	0.254
Noticed Any Cigarette Advertisement or Promotion	0.782	0.015	4346	5.52	0.019	0.029	0.753	0.811
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	0.378	0.023	4355	9.665	0.06	0.045	0.333	0.423
Believes that Tobacco Smoking Causes Serious Illness	0.863	0.013	4357	6.665	0.016	0.026	0.836	0.889
Believes that Tobacco Smoking Causes Strokes	0.444	0.022	4356	8.424	0.049	0.043	0.401	0.487
Believes that Tobacco Smoking Causes Heart Attacks	0.8	0.017	4356	7.61	0.021	0.033	0.767	0.832
Believes that Tobacco Smoking Causes Lung Cancer	0.842	0.014	4357	6.236	0.016	0.027	0.815	0.869
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	0.347	0.031	4357	18.601	0.09	0.061	0.286	0.408
Believes that Tobacco Smoking Causes Premature Birth	0.506	0.022	4357	8.357	0.043	0.043	0.463	0.549
Believes that Using Smokeless Tobacco Causes Serious Illness	0.224	0.02	4357	10.308	0.09	0.04	0.184	0.264
Believes that SHS Causes Serious Illness in Non-Smokers	0.733	0.018	4355	7.289	0.025	0.035	0.697	0.768
Number of Cigarettes Smoked per Day (by daily smokers)	8.053	0.773	90	1.527	0.096	1.516	6.536	9.569
Time since Quitting Smoking (in years)	10.134	2.065	27	1.161	0.204	4.048	6.086	14.181
Average Amount Spent on 20 Kretek Cigarettes	11019.855	913.977	101	2.284	0.083	1791.396	9228.459	12811.25
Monthly Expenditures on Kretek Cigarettes	98979.196	10442.259	101	0.932	0.105	20466.828	78512.368	119446.024
Age at Daily Smoking Initiation Among Adults Age 20-34	17.944	1.109	15	0.72	0.062	2.174	15.77	20.117

Table A.5: Sampling Errors - Urban, GATS Indonesia, 2011

Indicator	Estimate (R)	Standard Error (SE)	Sample size (n)	Design Effect (DEFT)	Relative Error (SE/R)	Margin of Error (MOE)	Confidence limits	
							Lower Limit (R-1.96SE)	Upper Limit (R+1.96SE)
Current Tobacco Users	0.33	0.011	4053	2.221	0.033	0.022	0.309	0.352
Current Tobacco Smokers	0.319	0.011	4102	2.22	0.034	0.021	0.298	0.341
Current Cigarette Smokers	0.319	0.011	4102	2.22	0.034	0.021	0.298	0.341
Current White Cigarette Smokers	0.028	0.006	4102	5.125	0.207	0.011	0.017	0.04
Current Hand-rolled Cigarette Smokers	0.024	0.006	4102	6.106	0.247	0.012	0.012	0.035
Current Kretek Cigarette Smokers	0.286	0.012	4102	3.091	0.043	0.024	0.262	0.31
Current Users of Smokeless Tobacco	0.012	0.002	4024	1613	0.178	0.004	0.008	0.017
Daily Tobacco Users	0.267	0.01	4102	2.221	0.039	0.02	0.246	0.287
Daily Tobacco Smoker	0.263	0.01	4102	2.222	0.039	0.02	0.243	0.283
Daily Cigarette Smokers	0.263	0.01	4102	2.222	0.039	0.02	0.243	0.283
Daily White Cigarette Smokers	0.021	0.004	4102	3.573	0.202	0.008	0.013	0.029
Daily Hand-rolled Cigarette Smokers	0.019	0.005	4102	5.769	0.272	0.01	0.009	0.029
Daily Kretek Cigarette Smokers	0.233	0.011	4102	2.596	0.046	0.021	0.213	0.254
Daily Users of Smokeless Tobacco	0.009	0.002	4024	1279	0.191	0.003	0.005	0.012
Former Daily Tobacco Smokers Among All Adults	0.037	0.004	4102	2.257	0.121	0.009	0.028	0.045
Former Tobacco Smokers Among Ever Daily Smokers	0.114	0.014	1337	2.429	0.19	0.027	0.087	0.14
Time to First Tobacco use within 5 minutes of waking	0.07	0.015	1092	3.613	0.21	0.029	0.041	0.099
Time to First Tobacco use within 6-30 minutes of waking	0.34	0.036	1092	6.472	0.107	0.072	0.268	0.411
Smoking Quit Attempt in the Past 12 Months	0.359	0.031	1343	5.519	0.086	0.06	0.299	0.419
Health Care Provider Asked about Smoking	0.421	0.04	403	2.655	0.095	0.079	0.343	0.5
Health Care Provider Advised Quitting Smoking	0.356	0.034	403	2.029	0.096	0.067	0.289	0.422
Use of Counseling/Advice or Quit Lines for Smoking Cessation	0.085	0.028	493	4.833	0.325	0.054	0.031	0.139
Planning to quit, thinking about quitting, or will quit smoking	0.506	0.045	1304	10.478	0.089	0.088	0.419	0.594
Exposure to SHS at Home	0.685	0.028	3998	14.123	0.04	0.054	0.631	0.739
Exposure to SHS at Workplace	0.478	0.034	1000	4.508	0.07	0.066	0.412	0.544
Exposure to SHS in Government Buildings/Offices Among Those Who Visited	0.586	0.031	951	3.781	0.053	0.061	0.525	0.647
Exposure to SHS in Health Care Facilities Among Those Who Visited	0.2	0.023	1501	4.852	0.114	0.045	0.155	0.244
Exposure to SHS in Restaurants Among Those Who Visited	0.874	0.016	1575	3.647	0.018	0.031	0.842	0.905
Exposure to SHS on Public Transportation Among Those Who Visited	0.702	0.027	1528	5.495	0.039	0.054	0.648	0.756
Last kretek purchase in store	0.194	0.043	1147	13.703	0.223	0.085	0.11	0.279
Last kretek purchase at kiosk	0.788	0.044	1147	13.179	0.056	0.086	0.702	0.874
Noticed Anti-tobacco Information on radio or television	0.511	0.031	4098	15.772	0.061	0.061	0.45	0.572
Noticed Health Warning Labels on Cigarette Packages	0.731	0.036	1307	8.495	0.049	0.07	0.66	0.801
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	0.279	0.027	1305	4.675	0.096	0.053	0.227	0.332
Noticed Any Cigarette Advertisement or Promotion	0.897	0.012	4095	6.747	0.014	0.024	0.873	0.921
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	0.514	0.036	4098	20.942	0.069	0.07	0.444	0.584
Believes that Tobacco Smoking Causes Serious Illness	0.881	0.017	4102	11.537	0.019	0.034	0.848	0.915
Believes that Tobacco Smoking Causes Strokes	0.55	0.031	4100	16.043	0.057	0.061	0.489	0.611
Believes that Tobacco Smoking Causes Heart Attacks	0.854	0.019	4100	12.294	0.023	0.038	0.816	0.892
Believes that Tobacco Smoking Causes Lung Cancer	0.872	0.016	4102	9.822	0.019	0.032	0.84	0.904
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	0.357	0.045	4101	36.715	0.127	0.089	0.268	0.446
Believes that Tobacco Smoking Causes Premature Birth	0.583	0.029	4102	13.706	0.049	0.056	0.527	0.639
Believes that Using Smokeless Tobacco Causes Serious Illness	0.217	0.027	4101	17.037	0.122	0.052	0.165	0.269
Believes that SHS Causes Serious Illness in Non-Smokers	0.795	0.022	4098	12.256	0.028	0.043	0.752	0.839
Number of Cigarettes Smoked per Day (by daily smokers)	12.254	0.394	1095	2.414	0.032	0.772	11.482	13.026
Time since Quitting Smoking (in years)	9.508	0.804	153	1.391	0.085	1.576	7.932	11.084
Average Amount Spent on 20 Kretek Cigarettes	14095.101	445.586	1145	4.603	0.032	873.348	13221.752	14968.449
Monthly Expenditures on Kretek Cigarettes	214470.94	10150.436	1145	2.388	0.047	19894.86	194576.084	234365.794
Age at Daily Smoking Initiation Among Adults Age 20-34	17.732	0.199	422	1.465	0.011	0.389	17.342	18.121

**Table A.6: Sampling Errors - Rural, GATS Indonesia, 2011**

Indicator	Estimate (R)	Standard Error (SE)	Sample size (n)	Design Effect (DEFT)	Relative Error (SE/R)	Margin of Error (MOE)	Confidence limits	
							Lower Limit (R-1.96SE)	Upper Limit (R+1.96SE)
Current Tobacco Users	0.391	0.013	4174	2.995	0.033	0.026	0.365	0.417
Current Tobacco Smokers	0.377	0.012	4203	2.558	0.032	0.023	0.353	0.4
Current Cigarette Smokers	0.376	0.012	4203	2.558	0.032	0.023	0.353	0.4
Current White Cigarette Smokers	0.016	0.003	4203	2.701	0.202	0.006	0.009	0.022
Current Hand-rolled Cigarette Smokers	0.071	0.012	4203	9.623	0.173	0.024	0.047	0.095
Current Kretek Cigarette Smokers	0.345	0.012	4203	2.898	0.036	0.024	0.321	0.369
Current Users of Smokeless Tobacco	0.022	0.003	4152	2.038	0.147	0.006	0.016	0.029
Daily Tobacco Users	0.33	0.013	4203	3.442	0.041	0.026	0.304	0.357
Daily Tobacco Smoker	0.322	0.013	4203	3.292	0.041	0.026	0.296	0.348
Daily Cigarette Smokers	0.321	0.013	4203	3.276	0.041	0.026	0.296	0.347
Daily White Cigarette Smokers	0.011	0.003	4203	2.611	0.24	0.005	0.006	0.016
Daily Hand-rolled Cigarette Smokers	0.057	0.01	4203	7.892	0.177	0.02	0.037	0.077
Daily Kretek Cigarette Smokers	0.284	0.014	4203	3.785	0.048	0.027	0.257	0.311
Daily Users of Smokeless Tobacco	0.015	0.002	4152	1.538	0.155	0.005	0.011	0.02
Former Daily Tobacco Smokers Among All Adults	0.029	0.004	4203	1.981	0.125	0.007	0.022	0.036
Former Tobacco Smokers Among Ever Daily Smokers	0.079	0.01	1543	2.266	0.131	0.02	0.059	0.099
Time to First Tobacco use within 5 minutes of waking	0.066	0.014	1330	4.513	0.22	0.028	0.037	0.094
Time to First Tobacco use within 6-30 minutes of waking	0.295	0.029	1330	5.485	0.099	0.057	0.238	0.353
Smoking Quit Attempt in the Past 12 Months	0.256	0.023	1566	4.318	0.09	0.045	0.211	0.301
Health Care Provider Asked about Smoking	0.392	0.044	510	4.101	0.112	0.086	0.306	0.478
Health Care Provider Advised Quitting Smoking	0.339	0.043	510	4.222	0.127	0.084	0.254	0.423
Use of Counseling/Advice or Quit Lines for Smoking Cessation	0.052	0.022	384	3.756	0.424	0.043	0.009	0.095
Planning to quit, thinking about quitting, or will quit smoking	0.472	0.037	1547	8.681	0.079	0.073	0.399	0.546
Exposure to SHS at Home	0.882	0.017	4179	11616	0.019	0.033	0.849	0.916
Exposure to SHS at Workplace	0.624	0.033	317	1468	0.053	0.065	0.559	0.689
Exposure to SHS in Government Buildings/Offices Among Those Who Visited	0.712	0.037	587	3.962	0.052	0.073	0.639	0.785
Exposure to SHS in Health Care Facilities Among Those Who Visited	0.151	0.019	1155	3.263	0.126	0.037	0.114	0.189
Exposure to SHS in Restaurants Among Those Who Visited	0.817	0.048	803	12.274	0.059	0.094	0.723	0.911
Exposure to SHS on Public Transportation Among Those Who Visited	0.696	0.033	969	5.013	0.048	0.065	0.631	0.761
Last kretek purchase in store	0.16	0.045	1347	20.452	0.283	0.089	0.071	0.248
Last kretek purchase at kiosk	0.806	0.049	1347	20.536	0.061	0.096	0.711	0.902
Noticed Anti-tobacco Information on radio or television	0.307	0.026	4203	12.897	0.083	0.05	0.257	0.357
Noticed Health Warning Labels on Cigarette Packages	0.715	0.031	1548	7.096	0.043	0.06	0.655	0.775
Thinking of Quitting Because of Health Warning Labels on Cigarette Package	0.263	0.026	1548	5.434	0.099	0.051	0.212	0.315
Noticed Any Cigarette Advertisement or Promotion	0.795	0.02	4197	10.179	0.025	0.039	0.756	0.834
Noticed Cigarette Marketing in Stores Where Cigarettes are Sold	0.397	0.035	4203	21.532	0.088	0.069	0.329	0.466
Believes that Tobacco Smoking Causes Serious Illness	0.838	0.017	4203	9.449	0.021	0.034	0.804	0.872
Believes that Tobacco Smoking Causes Strokes	0.359	0.029	4203	15.541	0.081	0.057	0.302	0.416
Believes that Tobacco Smoking Causes Heart Attacks	0.774	0.022	4203	11627	0.028	0.043	0.731	0.817
Believes that Tobacco Smoking Causes Lung Cancer	0.822	0.017	4203	8.049	0.02	0.033	0.789	0.854
Believes that Tobacco Smoking Causes Chronic Obstructive Pulmonary Disease (COPD)	0.364	0.042	4203	32.268	0.116	0.083	0.281	0.447
Believes that Tobacco Smoking Causes Premature Birth	0.406	0.031	4203	16.359	0.075	0.06	0.346	0.466
Believes that Using Smokeless Tobacco Causes Serious Illness	0.262	0.029	4203	18.562	0.111	0.057	0.205	0.32
Believes that SHS Causes Serious Illness in Non-Smokers	0.678	0.025	4203	12.376	0.037	0.05	0.628	0.727
Number of Cigarettes Smoked per Day (by daily smokers)	13.301	0.492	1327	3.716	0.037	0.964	12.338	14.265
Time since Quitting Smoking (in years)	9.761	0.875	129	1.322	0.09	1715	8.046	11477
Average Amount Spent on 20 Kretek Cigarettes	1614.655	401518	1331	2.827	0.035	786.975	10827.68	1240163
Monthly Expenditures on Kretek Cigarettes	185143.36	10472.4	1331	3.061	0.057	20525.9	164617.457	205669.265
Age at Daily Smoking Initiation Among Adults Age 20-34	17.499	0.246	439	2.733	0.014	0.483	17.016	17.982

## Appendix B: Sample Design

### B.1 Introduction

The GATS was the first survey of its kind conducted in Indonesia (in 2011) to monitor tobacco use and was designed to be a nationally representative household survey of all non-institutionalized men and women aged 15 years and above. The main objectives of this survey were to provide estimates of tobacco use, exposure to SHS and frequency of quit attempts, and to monitor tobacco control interventions. The survey design requirements for this study were developed such that precise estimates could be generated for the country as a whole, as well as for two analysis groups defined by gender and urban/rural areas.

The GATS is designed to produce national and subnational estimates among adults across countries. The target population of the GATS in Indonesia included all eligible individuals residing in all geographical areas in Indonesia. It included the civilian non-institutionalized population of men and women aged 15 years and above living in the included areas. This definition is important when completing the household questionnaire, which includes a section where all eligible members of the household are listed and one is randomly chosen to complete the individual questionnaire.

Individuals 15 years of age and above who were explicitly excluded from the survey were those who, at the time that the *Household Questionnaire* was completed, were:

- non-citizens visiting the country for a few weeks (e.g. tourists, in the country to see friends/relatives, etc.);
- citizens in the military who indicated that their usual place of residence was a military base; or
- citizens who were institutionalized – people in hospitals, prisons, nursing homes and other such institutions; such people were not sampled in the GATS.

Individuals were considered as residents of Indonesia if they were: (i) citizens of, and residing in, Indonesia; or (ii) non-citizens who were living in Indonesia, and considered Indonesia to be their usual country of residence (i.e. they had lived in Indonesia for at least half of the time during the 12 months prior to completing the *Household Questionnaire*).

### B.2 Sampling frame

The sampling frame used for the GATS 2011 was mainly CBs of the 2010 Population Census of Indonesia conducted in May 2010. In total, there are 723 831 ordinary CBs composed of geographical areas of Indonesia. A CB is an area within a village which is the smallest administrative area and covers 80–120 households. Therefore, a village is completely divided into several CBs. The definition of urban and rural areas is applied to a village. Therefore, all CBs in a village will have the same type of area as the village they belong to. If a village is an urban village, all CBs in the village will also be urban CBs. On the other hand, if a village is a rural village, all CBs will also be rural.

The primary sampling unit (PSU) for the GATS is then defined as a group of CBs within a subdistrict in a certain area, namely, urban or rural. In this case, a group of urban CBs and a group of rural CBs in a certain subdistrict belong to a separate PSU. In other words, PSU is an area that is somewhere between a CB and subdistrict in size.



All urban CBs in the same subdistrict will be an urban PSU and all rural CBs in the same district will be a rural PSU. Thus, a PSU in a rural area is not a village but a group of CBs classified as rural in the same subdistrict. Similarly, an urban PSU is a group of CBs classified as urban in the same subdistrict. Both urban and rural PSUs may very well have CBs from multiple villages or administrative areas under the subdistrict. So, each subdistrict contributes either one or two PSUs to the GATS frame. It can be said that a PSU for the GATS design is in effect the set of all urban CBs in a subdistrict or the set of all rural CBs in a subdistrict, in order to clearly facilitate separation of PSUs by urban/rural areas. In this way, the GATS sampling frame consists of a list of all PSUs, including small and big islands in Indonesia, regardless whether they are hard to reach (extremely remote) or not. In total, there are 9319 PSUs. On average, there are 78 CBs in a PSU. However, 69 among the 9319 PSUs have less than three CBs.

Remote areas are excluded from the sampling frame. In total, there are 353 PSUs among the 9319 PSUs which are classified as remote areas. Not all the remote areas are offshore island CBs. Some are in very isolated areas – in forest or mountainous areas, for example. These remote areas constitute approximately 1.62% of the total population, as shown in Table B.1.

**Table B.1.** Total number of PSUs by classification of areas – GATS Indonesia, 2011

AREAS	PSU	Census block	Household	Population	%
Non-remote	8966	710,727	60,303,273	233,675,183	98.38
Remote	353	13,104	991,933	3,843,740	1.62
TOTAL	9319	723,831	61,295,206	237,518,923	100.00

Indonesia consists of many islands and is divided into 33 provinces and 497 districts. For implementation of the GATS 2011, these 33 provinces were then stratified into four groups—Sumatra, which covers all provinces in Sumatra island; Java–Bali, which covers all provinces in Java and Bali islands; Kalimantan–Nusa Tenggara, which includes all provinces in Kalimantan and Nusa Tenggara islands; and Eastern, which consists of all other provinces in the eastern part of Indonesia. PSUs were then stratified according to these regions.

The total number of PSUs selected for GATS Indonesia 2011 was 100. According to the GATS standard protocol, the PSUs should be equally distributed between urban and rural areas. Hence, 50 PSUs were selected to represent urban areas, and 50 PSUs were drawn from the rural PSUs. Before a PSU was selected, 50 PSUs in each area were proportionally allocated to each region according to their population size, as shown in Table B.2.

**Table B.2.** Total number of sample PSUs by place of residence and region – GATS Indonesia, 2011

Urbanicity	Region	Population	Allocation	Number of PSU samples
1	1	18,854,356	7.728082	8
1	2	87,283,784	35.77615	36
1	3	8,678,208	3.557051	4
1	4	7,169,648	2.938718	2
<b>URBAN</b>				<b>50</b>
2	1	30,262,700	12.28246	12
2	2	64,299,312	26.0966	26
2	3	14,130,412	5.734986	6
2	4	14,502,404	5.885963	6
<b>RURAL</b>				<b>50</b>

**B.3 Sample design**

The GATS 2011 adopted a four-stage stratified cluster sample of households. This design was applied in each stratum. In the first stage, a number of PSUs were selected with PPS. The measure of size (MoS) used to select PSUs was the total number of households in each PSU according to the results of the 2010 Population Census (see Figure B1 for the distribution of districts where PSUs were selected). In the second stage, three SSUs were also selected using PPS, with the MoS as the total number of households in each SSU or CB. For choosing CBs within a selected PSU, in both urban and rural PSUs, a list of CBs was sorted by village within each PSU, implying that use of the village was implicit. Household selection in the third stage was an equal probability systematic selection with 30 households per CB, using a fractional interval technique. Finally, in the fourth stage, one individual was randomly chosen from all the eligible persons in a selected household.

**B.4 Sample size**

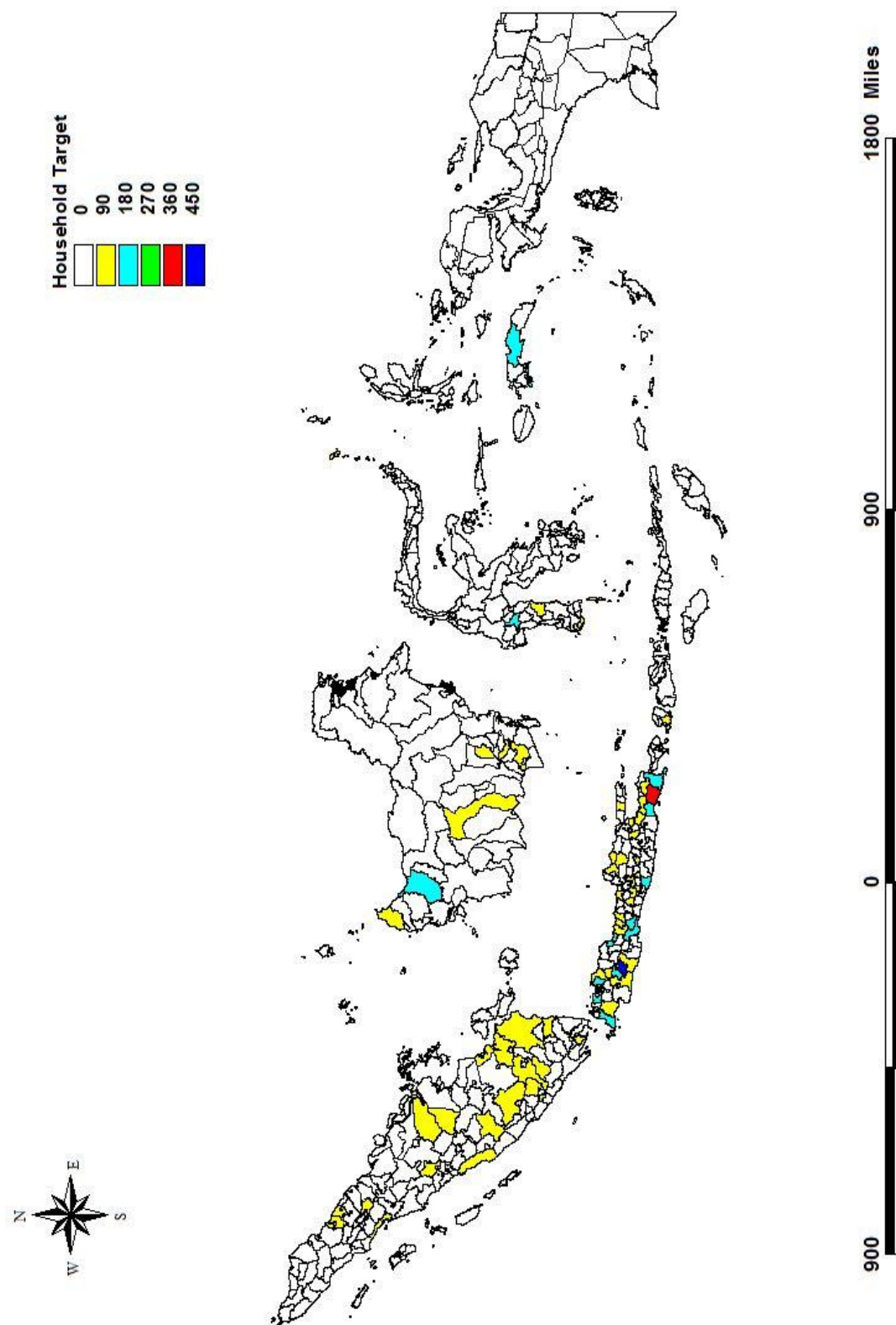
The GATS is designed to produce estimates that meet the following precision requirements:

1. Estimates computed at the national level, by urbanicity, gender and the cross of gender and urbanicity should have a 95% confidence interval with a margin of error of 3 percentage points or less for tobacco use rates of 40%.
2. Sample sizes should be sufficiently large to accommodate the statistical power requirements for tests to detect differences between survey rounds with independently chosen samples.

Assuming a design effect of 2.00 for estimates computed at the national level by urban/rural classification, by gender and by the cross of gender and urban/rural area, the minimum sample sizes needed to accommodate these precision requirements were 2000 respondents in each of the four groups defined by the cross of urban/rural residence and gender. This resulted in a minimum expected respondent sample size of 8000.



**Figure B.1.** Distribution of districts where PSUs were selected – GATS Indonesia, 2011



However, in order to compensate for non-response based on the previous surveys done by BPS, the following information was used to fix the number of households sampled:

- Total number of respondents in the stratum	– 4000
- Individual eligibility rate	– 98%
- Individual response rate	– 95%
- Household eligibility rate	– 100%
- Household response rate	– 97%
- Percentage of households with at least one eligible respondent	– 99%

Total number of selected people within households	: 4000/ (0.98*0.95)	= 4297
Total number of selected households	: 4297/ (1*0.97*0.99)	= 4475
So the total household sample will be	: 2*4475	= 8950

As a result, the number of households selected in each CB was fixed at 30 households and the final adjusted sample size of 9000 households was used.

## B.5 Sampling probabilities and sampling weights

The weighting process for the GATS involved a three-step process: (1) the base weight or design weight, calculated from all steps of random selection in the sample design, (2) an adjustment for non-response by sample households and sample individuals eligible for the survey, and (3) a post-stratification adjustment (calibration) of sample totals with the known population totals.

### B.5.1 Base weight

The inverse of the unconditional probability of selection was the final selection weight (base weight) for each respondent, which is the product of the probabilities of selection associated with each stage of the design. In order to calculate the sampling weights, sampling probabilities were calculated separately for each sampling stage:

$p_{hi}^{(1)}$  = Unconditional probability of selecting the  $i$ -th PSU in the  $h$ -th stratum;

$p_{hij}^{(2)}$  = Conditional probability (given PSU selections) of selecting the CB;

$p_{hijk}^{(3)}$  = Conditional probability (given PSU and CB selections) of selecting the household;

$p_{hijkl}^{(4)}$  = Conditional probability (given PSU, CB and household selections) of randomly selecting one respondent per household

The unconditional joint probability of selecting an individual (the  $hijkl$  -th person) into the GATS sample is then:

$$P_{hijkl} = p_{hi}^{(1)} * p_{hij}^{(2)} * p_{hijk}^{(3)} * p_{hijkl}^{(4)}.$$

Thus, the associated base weight for the individual is:

$$B_{hijkl} = \frac{1}{P_{hijkl}} = \frac{1}{p_{hi}^{(1)} * p_{hij}^{(2)} * p_{hijk}^{(3)} * p_{hijkl}^{(4)}}.$$

Each of the selection probabilities in the above equation were calculated are as follows:

- The selection probabilities of  $i$ -th PSU was given by

$$p_{hri}^{(1)} = \frac{a_{hr} M_{hri}}{M_{hr}}$$

where  $M_{hri}$  is the number of household of  $i$ -th PSU in  $h$ -th stratum,  $r$ -th region  
 $M_{hr}$  is the number of household in  $h$ -th stratum,  $r$ -th region  
 $a_{hr}$  is the number of PSUs selected in  $h$ -th stratum ( $h=1,2$ ),  $r$ -th region  
 $(r=1,2,3,4)$

- The selection probabilities at the second stage were

$$p_{hrij}^{(2)} = \frac{n_{hri} M_{hrij}}{M_{hri}}$$

where  $M_{hrij}$  is the number of household of  $j$ -th CB,  $i$ -th PSU in  $h$ -th stratum,  $r$ -th region  
 $M_{hri}$  is the number of household of  $i$ -th PSU in  $h$ -th stratum,  $r$ -th region  
 $n_{hri}$  is the number of CBs selected ( $=3$ ) in  $i$ -th PSU,  $h$ -th stratum ( $h=1,2$ ),  
 $r$ -th region ( $r=1,2,3,4$ ).

- The selection probabilities at the third stage were

$$p_{hrij}^{(3)} = \frac{m_{hrij}}{M_{hrij}^*}$$

where  $M_{hrij}^*$  is the number of updated household of  $j$ -th CB,  $i$ -th PSU in  $h$ -th stratum,  $r$ -th region  
 $m_{hrij}$  is the number of households selected ( $=30$ ) in  $j$ -th CB,  $i$ -th PSU,  
 $r$ -th region ( $r=1,2,3,4$ ),  $h$ -th stratum ( $h=1,2$ ).

- The selection probabilities at the fourth stage were

$$p_{hrijk}^{(4)} = \frac{1}{R_{hrijk}}$$

where  $R_{hrijk}$  is the number of eligible person in  $k$ -th households,  $j$ -th CB,  $i$ -th PSU,  
 $r$ -th region ( $r=1,2,3,4$ ),  $h$ -th stratum ( $h=1,2$ ).

### **B.5.2 Adjustment for unit non-response**

The base weights were adjusted for non-response on two factors: household-level non-response adjustments, and person-level non-response adjustments. Household-level non-response adjustments were made within the PSU. The corresponding household-level weighting class adjustment was computed as one divided by the weighted household response rate for each sample PSU. The person-level response rate was computed by roster-reported gender, age and current smoking status.

### **B.5.3 Post-stratification calibration adjustment**

In principle, the goal of a calibration weight adjustment is to bring weighted sums of the sample data in line with the corresponding counts in the target population. Provisional population total projections of persons 15 years and above by urban/rural residence, and respondent-reported gender and age groups (15–24, 25–44, 45–64 and 65+ years) from the population projection of the 2010 Population Census of Indonesia in September 2011 were used for post-stratification calibration adjustment.

Ultimately, the final analysis weight ( $W$ ) for the  $j$ -th respondent data record was computed as the product of the base weights, the non-response adjustment and post-stratification calibration adjustment. The final weights were used in all analyses to produce estimates of population parameters.

## Appendix C: Glossary and Abbreviations

Adults	Population 15 years of age and above
Awareness of cigarette advertising, promotion and sponsorship	Respondents who have noticed cigarettes at the point of sale, free gifts or discount offers on other products when buying cigarettes, or any advertisements or signs promoting cigarettes in stores where cigarettes are sold, in the past 30 days, or who have noticed any advertisement or sign promoting cigarettes of cigarette companies, sponsorships of sporting events other than in stores where cigarettes are sold, in the past 30 days
Beliefs about the dangers of second-hand smoke	Respondents who believe that breathing other people's smoke causes serious illness in non-smokers.
Beliefs about the dangers of tobacco smoking	Respondents who believe that tobacco smoking causes serious illness and specific diseases, i.e. stroke, heart attack, lung cancer, COPD, Bladder Cancer, Stomach cancer, premature birth and bone loss.
BPS	Badan Pusat Statistik—BPS Statistics Indonesia. It is national statistical organization working under the Ministry of Planning, Indonesia.
CB	Census Block
CCT	Conditional Cash Transfer
CDC	US Centers for Disease Control and Prevention
COPD	Chronic Obstructive Pulmonary Disease
Current smokeless tobacco user	Smokeless tobacco user who daily or occasionally uses any smokeless tobacco product
Current smoking	It includes daily smoking and occasional smoking: <ol style="list-style-type: none"> <li>1. Daily smoking means smoking at least one tobacco product every day or nearly every day over a period of a month or more</li> <li>2. Occasional smoking (less than daily)</li> </ol>
DALY	Disability-Adjusted Life Year
Exposure to anti-smoking information	Respondents who have noticed information on various media in the past 30 days about the dangers of cigarette smoking and those that encourage quitting
Exposure to second-hand smoke at home	Exposure to second-hand smoke particularly inside the respondent's home, not including outside areas such as patio, balcony, garden, etc. which are not fully enclosed
Exposure to second-hand smoke in public places	Includes smoking by respondents and seeing somebody smoke, smelling the smoke, or seeing cigarette butts in indoor areas in public places visited by them in the past 30 days. Public places include: <ul style="list-style-type: none"> <li>• Government buildings: Covers indoor areas which are designated non-smoking areas by national smoke-free laws</li> <li>• Health-care facilities: Covers indoor areas of both public and private health-care facilities which are designated non-smoking areas by national smoke-free laws</li> <li>• Restaurants: Covers the indoor areas of places selling food and/or beverages, and does not include the area in front of any building and wayside</li> <li>• Public transportation: CII public transport both with and without air conditioning</li> </ul>
FCTC	Framework Convention on Tobacco Control
GATS	Global Adult Tobacco Survey
GDP	Gross Domestic Product
GHPSS	Global Health Professions Students Survey
GSPS	Global School Personnel Survey
GSS	General Survey System
GTSS	Global Tobacco Surveillance System
GYTS	Global Youth Tobacco Survey
HCP	Health-Care Provider; includes various health professionals such as medical doctors, nurses,

	pharmacists, health workers, etc.
Interest in quitting smoking	Current tobacco smokers who are planning or thinking about quitting smoking within the next month, 12 months, or some day
MOH	Ministry of Health, Indonesia
MoS	Measure of Size
MPOWER	WHO publication with six key strategies for tobacco control: <ul style="list-style-type: none"> <li>• Monitor tobacco use and prevention policies</li> <li>• Protect people from tobacco smoke</li> <li>• Offer help to quit tobacco use</li> <li>• Warn about the dangers of tobacco</li> <li>• Enforce bans on tobacco advertising, promotion and sponsorship</li> <li>• Raise taxes on tobacco</li> </ul>
NGO	Non-Governmental Organization
NIHRD	National Institute of Health Research and Development. It works under the Ministry of Health, Indonesia
NIHRD	National Institute for Health Research and Development
NRT	Nicotine Replacement Therapy
PPS	Probability Proportional to Size
Prevalence	Statistical concept referring to the number of occurrences of tobacco use present in a particular population aged 15 years and above at a given time
PSU	primary sampling unit
QRC	Questionnaire Review Committee. It is a group of international experts for advising a country on questionnaire issues of GATS
Quit attempt	Current tobacco smokers who tried to quit during the past 12 months and former tobacco smokers who have been abstinent for >12 months
SD	Secure Digital
SDF	Standard Data File
SHS	Second-Hand Smoke
SRC	Sample Review Committee. A group of international experts for advising a country on sample issues of GATS.
SSU	Secondary Sampling Unit
SUSENAS	National Socio-Economic Survey
TCSC	Tobacco Control Support Centre
Thinking of quitting because of health warning on cigarette packages	Current tobacco smokers who thought about quitting smoking in the past 30 days because of the warning on cigarette packages
Tobacco products	There are two types of tobacco products: <ol style="list-style-type: none"> <li>1. Smoked tobacco: <ol style="list-style-type: none"> <li>a. kretek – a cigarette with cloves</li> <li>b. white cigarette</li> <li>c. hand-rolled cigarette</li> <li>d. other smoked tobacco products such as pipe, cigar, <i>khi-yo</i>, cheroot, water pipe, <i>hookah</i>, and others</li> </ol> </li> <li>2. Smokeless tobacco: <ol style="list-style-type: none"> <li>a. snuff by keeping in the mouth/nose</li> <li>b. chewing tobacco</li> <li>c. betel quid with tobacco</li> <li>d. others</li> </ol> </li> </ol>
TQS	Tobacco Questions for Surveys
WHO	World Health Organization
WHO SEARO	World Health Organization, Regional Office for South-East Asia

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Surabaya  
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	Neni Agustini	Dibya
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CDC Foundation  
Johns Hopkins Bloomberg School of Public Health (JHSPH)  
RTI International  
World Health Organization (WHO)

## Appendix E: Questionnaires

### Household questionnaire

**INTRO.** [THE HOUSEHOLD SCREENING RESPONDENT SHOULD BE 18 YEARS OF AGE OR OLDER AND YOU MUST BE CONFIDENT THAT THIS PERSON CAN PROVIDE ACCURATE INFORMATION ABOUT ALL MEMBERS OF THE HOUSEHOLD. IF NEEDED, VERIFY THE AGE OF THE HOUSEHOLD SCREENING RESPONDENT TO MAKE SURE HE/SHE IS 18 YEARS OF AGE OR OLDER.]

THE HOUSEHOLD SCREENING RESPONDENT CAN BE LESS THAN 18 YEARS OF AGE ONLY IF NO HOUSEHOLD MEMBERS ARE 18 YEARS OF AGE OR OLDER.]

**INTRO1.** An important survey of adult tobacco use behaviour is being conducted by **BPS-Statistics Indonesia** throughout **Indonesia** and your household has been selected to participate. All houses selected were chosen from a scientific sample and it is very important to the success of this project that each participates in the survey. All information gathered will be kept strictly confidential. I have a few questions to find out who in your household is eligible to participate.

**HH1.** First, I'd like to ask you a few questions about your household. In total, how many persons live in this household?

[INCLUDE ANYONE WHO CONSIDERS THIS HOUSEHOLD THEIR USUAL PLACE OF RESIDENCE]

--	--

**HH2.** How many of these household members are 15 years of age or older?

--	--

**[IF HH2 = 00 (NO HOUSEHOLD MEMBERS > 15 YEARS IN HOUSEHOLD)]**

[THERE ARE NO ELIGIBLE HOUSEHOLD MEMBERS.]

THANK THE RESPONDENT FOR HIS/HER TIME.

THIS WILL BE RECORDED IN THE RECORD OF CALLS AS CODE 201.]

**HH4.** I would now like to collect information about only these persons that live in this household who are 15 years of age or older. Let's start listing them from oldest to youngest.

**HH4a.** What is the {oldest/next oldest} person's first name? \_\_\_\_\_

**HH4b.** What is this person's age?

[IF RESPONDENT DOESN'T KNOW, PROBE FOR AN ESTIMATE]

--	--	--

**[IF REPORTED AGE IS 15 THROUGH 17 YEARS, BIRTH DATE IS ASKED]**

**HH4c.** What is the month of this person's date of birth?

--	--

**HH4cYEAR.** What is the year of this person's date of birth?

[IF DON'T KNOW, ENTER 7777

IF REFUSED, ENTER 9999]

--	--	--	--

**HH4d.** Is this person a man or woman?

MAN ..... ☐ 1

WOMAN..... ☐ 2

**HH4e.** Does this person currently smoke tobacco, including cigarettes, kretek cigarettes, cigars, pipes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ... ☐ 7

REFUSED..... ☐ 9

**[REPEAT HH4a – HH4e FOR EACH PERSON REPORTED IN HH2]**

**HH5.** [NAME OF THE SELECTED ELIGIBLE PERSON IS:

**{FILL SELECTED HH MEMBER’S FIRST NAME}**

ASK IF **{FILL SELECTED HH MEMBER’S FIRST NAME}** IS AVAILABLE AND IF SO, PROCEED TO THE INDIVIDUAL QUESTIONNAIRE.

IF **{FILL SELECTED HH MEMBER’S FIRST NAME}** IS NOT AVAILABLE, MAKE AN APPOINTMENT AND RECORD IT AS A COMMENT ON RECORD OF CALLS.]



### Individual questionnaire

**CONSENT1.** [SELECT THE APPROPRIATE AGE CATEGORY BELOW. IF NEEDED, CHECK THE AGE OF THE SELECTED RESPONDENT FROM THE “CASE INFO” SCREEN IN THE TOOLS MENU.]

- 15–17 ..... ☐ 1 → **GO TO CONSENT 2**  
18 OR OLDER..... ☐ 2 → **GO TO CONSENT 5**  
EMANCIPATED MINOR (15–17) ..... ☐ 3 → **GO TO CONSENT 5**

**CONSENT2.** Before starting the interview, I need to obtain consent from a parent or guardian of [NAME OF RESPONDENT] and from [NAME OF RESPONDENT].

[IF BOTH SELECTED RESPONDENT AND PARENT/GUARDIAN ARE AVAILABLE, CONTINUE WITH INTERVIEW.

IF PARENT/GUARDIAN IS NOT AVAILABLE, BREAK OFF INTERVIEW AND SCHEDULE AN APPOINTMENT TO RETURN.

IF MINOR RESPONDENT IS NOT AVAILABLE, CONTINUE WITH OBTAINING PARENTAL CONSENT.]

**CONSENT3.** [READ THE FOLLOWING TO THE PARENT/GUARDIAN AND SELECTED RESPONDENT (IF AVAILABLE):]

I am working with BPS-Indonesia. This institution is collecting information about tobacco use in Indonesia. This information will be used for public health purposes by the Ministry of Health.

Your household and [NAME OF RESPONDENT]’s have been selected at random. [NAME OF RESPONDENT]’s responses are very important to us and the community, as these answers will represent many other persons.

The interview will last around 30 minutes. [NAME OF RESPONDENT]’s participation in this survey is entirely voluntary. The information that [NAME OF RESPONDENT] will provide will be kept strictly confidential and [NAME OF RESPONDENT] will not be identified by his/her responses. Personal information will not be shared with anyone else, not even other family members including you. [NAME OF RESPONDENT] can withdraw from the study at any time, and may refuse to answer any question.

We will leave the necessary contact information with you. If you have any questions about this survey, you can contact the telephone numbers listed.

If you agree with [NAME OF RESPONDENT]'s participation in this survey, we will conduct a private interview with him/her.

[ASK PARENT/GUARDIAN:] Do you agree with [NAME OF RESPONDENT]'s participation?

YES..... ☐ 1 → **GO TO CONSENT4**

NO ..... ☐ 2 → **END INTERVIEW**

**CONSENT4.** [WAS THE SELECTED MINOR RESPONDENT PRESENT?]

PRESENT ..... ☐ 1 → **GO TO CONSENT6**

NOT PRESENT ..... ☐ 2 → **GO TO CONSENT5**

**CONSENT5.** [READ TO THE SELECTED RESPONDENT:]

I am working with BPS-Indonesia. This institution is collecting information about tobacco use in Indonesia. This information will be used for public health purposes by the Ministry of Health.

Your household and you have been selected at random. Your responses are very important to us and the community, as these answers will represent many other persons. The interview will last around 30 minutes. Your participation in this survey is entirely voluntary. The information that you will provide us will be kept strictly confidential, and you will not be identified by your responses. Personal information will not be shared with anyone else, not even other family members. You can withdraw from the study at any time, and may refuse to answer any question.

We will leave the necessary contact information with you. If you have any questions about this survey, you can contact the telephone numbers listed.

**{FILL IF CONSENT4=2: Your parent/guardian has given his/her permission for you to participate in this study}**

If you agree to participate, we will conduct a private interview with you.

**CONSENT6.** [ASK SELECTED RESPONDENT:] Do you agree to participate?

YES..... ☐ 1 → **PROCEED WITH INTERVIEW**

NO ..... ☐ 2 → **END INTERVIEW**

**INTLANG.** [IS THIS INTERVIEW BEING CONDUCTED IN BAHASA OR IS IT BEING TRANSLATED AND CONDUCTED IN ANOTHER LANGUAGE?]

BAHASA ..... ☐ 1 → **GO TO SECTION A**

ANOTHER LANGUAGE ..... ☐ 2

**INTLANG1.** [WHAT LANGUAGE IS THIS INTERVIEW BEING CONDUCTED IN?]

\_\_\_\_\_

## SECTION **A.** BACKGROUND CHARACTERISTICS

---

**A00.** I am going to first ask you a few questions about your background.

**A01.** [RECORD GENDER FROM OBSERVATION. ASK IF NECESSARY.]

MEN ..... ☐ 1

WOMEN .... ☐ 2

**A02a.** What is the month of your date of birth?

01 ..... ☐ 1

02 ..... ☐ 2

03 ..... ☐ 3

04 ..... ☐ 4

05 ..... ☐ 5

06 ..... ☐ 6

07 ..... ☐ 7

08 ..... ☐ 8

09 ..... ☐ 9

10 ..... ☐ 10

11 ..... ☐ 11

12 ..... ☐ 12

DON'T KNOW ... ☐ 77

REFUSED..... ☐ 99

**A02b.** What is the year of your date of birth?

[IF DON'T KNOW, ENTER 7777

IF REFUSED, ENTER 9999]

--	--	--	--

[IF MONTH=77/99 OR YEAR=7777/9999, ASK A03. OTHERWISE SKIP TO A04.]

**A03.** How old are you?

[IF RESPONDENT IS UNSURE, PROBE FOR AN ESTIMATE AND RECORD AN ANSWER.

IF REFUSED, BREAK OFF AS WE CANNOT CONTINUE INTERVIEW WITHOUT AGE.]

--	--	--

**A03a.** [WAS RESPONSE ESTIMATED?]

- YES..... ☐ 1  
 NO ..... ☐ 2  
 DON'T KNOW ..... ☐ 7

**A04.** What is the highest level of education you have completed?  
 [SELECT ONLY ONE CATEGORY]

- LESS THAN PRIMARY SCHOOL COMPLETED ..... ☐ 1  
 PRIMARY SCHOOL COMPLETED ..... ☐ 2  
 SECONDARY SCHOOL COMPLETED..... ☐ 3  
 HIGH SCHOOL COMPLETED ..... ☐ 4  
 COLLEGE/UNIVERSITY COMPLETED..... ☐ 5  
 POSTGRADUATE DEGREE COMPLETED ..... ☐ 6  
 DON'T KNOW ..... ☐ 77  
 REFUSED ..... ☐ 99

**A05.** Which of the following best describes your \*main\* work status over the past 12 months?  
 Government employee, nongovernment employee, self-employed, student, home-maker,  
 retired, unemployed-able to work, or unemployed-unable to work?  
 [INCLUDE SUBSISTENCE FARMING AS SELF-EMPLOYED]

- GOVERNMENT EMPLOYEE ..... ☐ 1  
 NONGOVERNMENT EMPLOYEE ..... ☐ 2  
 SELF-EMPLOYED/SUBSISTENCE FARMING..... ☐ 3  
 STUDENT ..... ☐ 4  
 HOME MAKER ..... ☐ 5  
 RETIRED ..... ☐ 6  
 UNEMPLOYED, ABLE TO WORK ..... ☐ 7  
 UNEMPLOYED, UNABLE TO WORK ..... ☐ 8  
 DON'T KNOW ..... ☐ 77  
 REFUSED..... ☐ 99

**A06.** Please tell me whether this household or any person who lives in the household has the following items:

	YES ▼	NO ▼	DON'T KNOW ▼	REFUSED ▼
a. Electricity? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
b. Flush toilet?.....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
c. Fixed telephone?.....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
d. Cell telephone? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
e. Television? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
f. Radio? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
g. Refrigerator? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
h. Car? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
i. Moped/scooter/motorcycle?	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
j. Washing machine? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
k. Computer? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
l. Bicycle? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
m. Boat? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9
n. Air conditioner? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 7.....	<input type="checkbox"/> 9

## SECTION B. TOBACCO SMOKING

---

**B00.** I would now like to ask you some questions about \*smoking\* tobacco, including cigarettes, kretek cigarettes, cigars, pipes.

Please do not answer about smokeless tobacco at this time.

**B01.** Do you \*currently\* smoke tobacco on a daily basis, less than daily, or not at all?

- DAILY ..... ☐ 1 → **SKIP TO B04**  
LESS THAN DAILY ..... ☐ 2  
NOT AT ALL ..... ☐ 3 → **SKIP TO B03**  
DON'T KNOW ..... ☐ 7 → **SKIP TO NEXT SECTION**  
REFUSED ..... ☐ 9 → **SKIP TO NEXT SECTION**

**B02.** Have you smoked tobacco daily in the past?

- YES ..... ☐ 1 → **SKIP TO B08**  
NO ..... ☐ 2 → **SKIP TO B10**  
DON'T KNOW ..... ☐ 7 → **SKIP TO B10**  
REFUSED ..... ☐ 9 → **SKIP TO B10**

**B03.** In the \*past\*, have you smoked tobacco on a daily basis, less than daily, or not at all?

[IF RESPONDENT HAS SMOKED BOTH "DAILY" AND "LESS THAN DAILY" IN THE PAST, CHECK "DAILY"]

- DAILY ..... ☐ 1 → **SKIP TO B11**  
LESS THAN DAILY ..... ☐ 2 → **SKIP TO B13**  
NOT AT ALL ..... ☐ 3 → **SKIP TO NEXT SECTION**  
DON'T KNOW ..... ☐ 7 → **SKIP TO NEXT SECTION**  
REFUSED ..... ☐ 9 → **SKIP TO NEXT SECTION**

**[CURRENT DAILY SMOKERS]**

**B04.** How old were you when you first started smoking tobacco \*daily\*?

[IF DON'T KNOW OR REFUSED, ENTER 99]

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**[IF B04 = 99, ASK B05. OTHERWISE SKIP TO B06.]**

**B05.** How many years ago did you first start smoking tobacco \*daily\*?

[IF REFUSED, ENTER 99]

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**B06.** On average, how many of the following products do you currently smoke each day? Also, let me know if you smoke the product, but not every day.

[IF RESPONDENT REPORTS SMOKING THE PRODUCT BUT NOT EVERY DAY, ENTER 888]

IF RESPONDENT REPORTS IN PACKS OR CARTONS, PROBE TO FIND OUT HOW MANY ARE IN EACH AND CALCULATE TOTAL NUMBER]

a. Manufactured white cigarettes?				PER DAY
a1. <b>[IF B06a=888]</b> On average, how many manufactured white cigarettes do you currently smoke each week?				PER WEEK
b. Hand-rolled (RYO) cigarettes?				PER DAY
b1. <b>[IF B06b=888]</b> On average, how many hand-rolled (RYO) cigarettes do you currently smoke each week?				PER WEEK
c. Kretek cigarettes?				PER DAY
c1. <b>[IF B06c=888]</b> On average, how many kretek cigarettes do you currently smoke each week?				PER WEEK
d. Pipes full of tobacco?				PER DAY
d1. <b>[IF B06d=888]</b> On average, how many pipes full of tobacco do you currently smoke each week?				PER WEEK
e. Cigars?				PER DAY



e1. <b>[IF B06e=888]</b> On average, how many cigars do you currently smoke each week?				PER WEEK
f. Number of <i>shisha</i> sessions per day?				PER DAY
f1. <b>[IF B06f=888]</b> On average, how many <i>shisha</i> sessions do you currently participate in each week?				PER WEEK
g. Any others? (→ g1. Please specify the other type you currently smoke each day:_____)				PER DAY
g2. <b>[IF B06g=888]</b> On average, how many [FILL PRODUCT] do you currently smoke each week?				PER WEEK

**B07.** How soon after you wake up do you usually have your first smoke? Would you say within 5 minutes, 6–30 minutes, 31–60 minutes, or more than 60 minutes?

- WITHIN 5 MINUTES..... ☐ 1  
 6–30 MINUTES ..... ☐ 2  
 31–60 MINUTES ..... ☐ 3  
 MORE THAN 60 MINUTES..... ☐ 4  
 REFUSED..... ☐ 9

**[SKIP TO NEXT SECTION]**

**[CURRENT LESS THAN DAILY SMOKERS]**

**B08.** How old were you when you first started smoking tobacco \*daily\*?

[IF DON'T KNOW OR REFUSED, ENTER 99]

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**[IF B08 = 99, ASK B09. OTHERWISE SKIP TO B10.]**

**B09.** How many years ago did you first start smoking tobacco \*daily\*?

[IF REFUSED, ENTER 99]

--	--

**B10.** How many of the following do you currently smoke during a usual week?

[IF RESPONDENT REPORTS DOING THE ACTIVITY \*WITHIN THE PAST 30 DAYS\*, BUT LESS THAN ONCE PER WEEK, ENTER 888

IF RESPONDENT REPORTS IN PACKS OR CARTONS, PROBE TO FIND OUT HOW MANY ARE IN EACH AND CALCULATE TOTAL NUMBER]

a. Manufactured white cigarettes? .....				PER WEEK
b. Hand-rolled (RYO) cigarettes? .....				PER WEEK
c. Kretek cigarettes? .....				PER WEEK
d. Pipes full of tobacco? .....				PER WEEK
e. Cigars? .....				PER WEEK
f. Number of <i>shisha</i> sessions per week? .....				PER WEEK
g. Any others? .....				PER WEEK

→ g1. Please specify the other type you currently smoke during a usual week:

**[SKIP TO NEXT SECTION]**

**[FORMER SMOKERS]**

**B11.** How old were you when you first started smoking tobacco \*daily\*?

[IF DON'T KNOW OR REFUSED, ENTER 99]

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**[IF B11 = 99, ASK B12. OTHERWISE SKIP TO B13a.]**

**B12.** How many years ago did you first start smoking tobacco \*daily\*?

[IF REFUSED, ENTER 99]

--	--

**B13a.** How long has it been since you stopped smoking?

[ONLY INTERESTED IN WHEN RESPONDENT STOPPED SMOKING REGULARLY — DO NOT INCLUDE RARE INSTANCES OF SMOKING]

ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]

- YEARS ..... ☐ 1  
MONTHS..... ☐ 2  
WEEKS ..... ☐ 3  
DAYS..... ☐ 4  
LESS THAN 1 DAY ..... ☐ 5 → **SKIP TO B14**  
DON'T KNOW ..... ☐ 7 → **SKIP TO NEXT SECTION**  
REFUSED..... ☐ 9 → **SKIP TO NEXT SECTION**

**B13b.** [ENTER NUMBER OF (YEARS/MONTHS/WEEKS/DAYS)]

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**[IF B13a/b <1 YEAR (<12 MONTHS), THEN CONTINUE WITH B14. OTHERWISE SKIP TO NEXT SECTION.]**

**B14.** Have you visited a doctor or other health-care provider in the past 12 months?

YES..... ☐ 1  
 NO ..... ☐ 2 → **SKIP TO B18**  
 REFUSED..... ☐ 9 → **SKIP TO B18**

**B15.** How many times did you visit a doctor or health-care provider in the past 12 months? Would you say 1 or 2 times, 3–5 times, or 6 or more times?

1 OR 2..... ☐ 1  
 3–5 ..... ☐ 2  
 6 OR MORE..... ☐ 3  
 REFUSED..... ☐ 9

**B16.** During any visit to a doctor or health-care provider in the past 12 months, were you asked if you smoke tobacco?

YES..... ☐ 1  
 NO ..... ☐ 2 → **SKIP TO B18**  
 REFUSED..... ☐ 9 → **SKIP TO B18**

**B17.** During any visit to a doctor or health-care provider in the past 12 months, were you advised to quit smoking tobacco?

YES..... ☐ 1  
 NO ..... ☐ 2  
 REFUSED..... ☐ 9

**B18.** During the past 12 months, did you use any of the following to try to stop smoking tobacco?

	YES ▼	NO ▼	REFUSED ▼
a. Counselling, including at a smoking cessation clinic? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
b. Nicotine replacement therapy, such as a patch or gum? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
c. Other prescription medications, for example, bupropion, varenicline? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
d. Traditional medicines, for example herbal/medicinal plants? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
e. Quit without assistance? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
f. Switching to smokeless tobacco such as: chewing tobacco, inhaling tobacco powder, and <i>sirih</i> with tobacco? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
g. Anything else? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9

→ g1. Please specify what you used to try to stop smoking:

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## SECTION C. SMOKELESS TOBACCO

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**C00.** The next questions are about using smokeless tobacco, such as *sirih*, betel quid, tobacco leaf, tobacco leaf and betel nut mixture. Smokeless tobacco is tobacco that is not smoked, but is sniffed through the nose, held in the mouth, or chewed.

**C01.** Do you \*currently\* use smokeless tobacco on a daily basis, less than daily, or not at all?  
[IF RESPONDENT DOES NOT KNOW WHAT SMOKELESS TOBACCO IS, EITHER PRESENT A SHOWCARD OR READ DEFINITION FROM QXQ SCREEN]

DAILY ..... ☐ 1 → SKIP TO NEXT SECTION  
LESS THAN DAILY..... ☐ 2  
NOT AT ALL..... ☐ 3 → SKIP TO C03  
DON'T KNOW ..... ☐ 7 → SKIP TO NEXT SECTION  
REFUSED..... ☐ 9 → SKIP TO NEXT SECTION

**C02.** Have you used smokeless tobacco daily in the past?

YES..... ☐ 1 → SKIP TO C19  
NO ..... ☐ 2 → SKIP TO C19  
DON'T KNOW ..... ☐ 7 → SKIP TO C19  
REFUSED..... ☐ 9 → SKIP TO C19

**C03.** In the \*past\*, have you used smokeless tobacco on a daily basis, less than daily, or not at all?

[IF RESPONDENT HAS DONE BOTH “DAILY” AND “LESS THAN DAILY” IN THE PAST, CHECK “DAILY”]

DAILY ..... ☐ 1 → SKIP TO NEXT SECTION  
LESS THAN DAILY..... ☐ 2 → SKIP TO NEXT SECTION  
NOT AT ALL..... ☐ 3 → SKIP TO NEXT SECTION  
DON'T KNOW ..... ☐ 7 → SKIP TO NEXT SECTION  
REFUSED..... ☐ 9 → SKIP TO NEXT SECTION

**C19.** [ADMINISTER IF B01=2 AND C01=2. ELSE GO TO NEXT SECTION.]

You mentioned that you smoke tobacco, but not every day and that you also use smokeless tobacco, but not every day. Thinking about both smoking tobacco and using smokeless tobacco, would you say you currently use tobacco on a daily basis or less than daily?

DAILY ..... ☐ 1  
LESS THAN DAILY..... ☐ 2

REFUSED..... ☐ 9

## SECTION **EC**. ELECTRONIC CIGARETTES

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**EC1.** Have you ever heard of electronic cigarettes?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO NEXT SECTION**

REFUSED..... ☐ 9 → **SKIP TO NEXT SECTION**

**EC2.** Do you *\*currently\** use electronic cigarettes on a daily basis, less than daily, or not at all?

DAILY ..... ☐ 1

LESS THAN DAILY..... ☐ 2

NOT AT ALL..... ☐ 3

REFUSED..... ☐ 9

## SECTION D1. CESSATION – TOBACCO SMOKING

IF B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES TOBACCO), CONTINUE WITH THIS SECTION.

IF B01 = 3, 7 OR 9 (RESPONDENT DOES NOT CURRENTLY SMOKE TOBACCO), SKIP TO NEXT SECTION.

**D01.** The next questions ask about any attempts to stop smoking that you might have made during the past 12 months. Please think about tobacco smoking.

During the past 12 months, have you tried to stop smoking?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO D04**

REFUSED..... ☐ 9 → **SKIP TO D04**

**D02a.** Thinking about the last time you tried to quit, how long did you stop smoking?

[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]

MONTHS..... ☐ 1

WEEKS ..... ☐ 2

DAYS..... ☐ 3

LESS THAN 1 DAY (24 HOURS) ..... ☐ 4 → **SKIP TO D03**

DON'T KNOW ..... ☐ 7 → **SKIP TO D03**

REFUSED..... ☐ 9 → **SKIP TO D03**

**D02b.** [ENTER NUMBER OF (MONTHS/WEEKS/DAYS)]

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**D03.** During the past 12 months, did you use any of the following to try to stop smoking tobacco?

	YES ▼	NO ▼	REFUSED ▼
a. Counselling, including at a smoking cessation clinic? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
b. Nicotine replacement therapy, such as a patch or gum? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
c. Other prescription medications, for example, bupropion, varenicline? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
d. Traditional medicines, for example, herbal/medicinal plants? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
e. Quit without assistance? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
f. Switching to smokeless tobacco such as: chewing tobacco, inhaling tobacco powder, and <i>sirih</i> with tobacco? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9
g. Anything else? .....	<input type="checkbox"/> 1.....	<input type="checkbox"/> 2.....	<input type="checkbox"/> 9

→ g1. Please specify what you used to try to stop smoking:

**D04.** Have you visited a doctor or other health-care provider in the past 12 months?

YES..... ☐ 1  
NO ..... ☐ 2 → **SKIP TO D08**  
REFUSED..... ☐ 9 → **SKIP TO D08**

**D05.** How many times did you visit a doctor or health-care provider in the past 12 months? Would you say 1 or 2 times, 3–5 times, or 6 or more times?

1 OR 2..... ☐ 1  
3–5 ..... ☐ 2  
6 OR MORE..... ☐ 3  
REFUSED..... ☐ 9

**D06.** During any visit to a doctor or health-care provider in the past 12 months, were you asked if you smoke tobacco?

YES..... ☐ 1  
NO ..... ☐ 2 → **SKIP TO D08**  
REFUSED..... ☐ 9 → **SKIP TO D08**

**D07.** During any visit to a doctor or health-care provider in the past 12 months, were you advised to quit smoking tobacco?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**D08.** Which of the following best describes your thinking about quitting smoking? I am planning to quit within the next month, I am thinking about quitting within the next 12 months, I will quit some day but not within the next 12 months, or I am not interested in quitting?

QUIT WITHIN THE NEXT MONTH ..... ☐ 1  
THINKING WITHIN THE NEXT 12 MONTHS ..... ☐ 2  
QUIT SOMEDAY, BUT NOT NEXT 12 MONTHS. .... ☐ 3  
NOT INTERESTED IN QUITTING ..... ☐ 4  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9



## SECTION E. SECOND-HAND SMOKE

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**E01.** I would now like to ask you a few questions about smoking in various places.

Which of the following best describes the rules about smoking inside your home: Smoking is allowed inside of your home, smoking is generally not allowed inside your home but there are exceptions, smoking is never allowed inside your home, or there are no rules about smoking in your home?

- ALLOWED ..... ☐ 1  
NOT ALLOWED, BUT EXCEPTIONS ..... ☐ 2  
NEVER ALLOWED ..... ☐ 3 → **SKIP TO E04**  
NO RULES ..... ☐ 4 → **SKIP TO E03**  
DON'T KNOW ..... ☐ 7 → **SKIP TO E03**  
REFUSED..... ☐ 9 → **SKIP TO E03**

**E02.** Inside your home, is smoking allowed in every room?

- YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**E03.** How often does \*anyone\* smoke inside your home? Would you say daily, weekly, monthly, less than monthly, or never?

- DAILY ..... ☐ 1  
WEEKLY ..... ☐ 2  
MONTHLY..... ☐ 3  
LESS THAN MONTHLY ..... ☐ 4  
NEVER..... ☐ 5  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**E04.** Do you currently work outside of your home?

- YES..... ☐ 1  
NO/DON'T WORK..... ☐ 2 → **SKIP TO E09**  
REFUSED..... ☐ 9 → **SKIP TO E09**

**E05.** Do you usually work indoors or outdoors?

INDOORS ..... ☐ 1 → **SKIP TO E07**  
 OUTDOORS..... ☐ 2  
 BOTH ..... ☐ 3 → **SKIP TO E07**  
 REFUSED..... ☐ 9

**E06.** Are there any indoor areas at your workplace?

YES..... ☐ 1  
 NO ..... ☐ 2 → **SKIP TO E09**  
 DON'T KNOW ..... ☐ 7 → **SKIP TO E09**  
 REFUSED..... ☐ 9 → **SKIP TO E09**

**E07.** Which of the following best describes the indoor smoking policy where you work: Smoking is allowed anywhere, smoking is allowed only in some indoor areas, smoking is not allowed in any indoor areas, or there is no policy?

ALLOWED ANYWHERE ..... ☐ 1  
 ALLOWED ONLY IN SOME INDOOR AREAS ..... ☐ 2  
 NOT ALLOWED IN ANY INDOOR AREAS ..... ☐ 3  
 THERE IS NO POLICY ..... ☐ 4  
 DON'T KNOW ..... ☐ 7  
 REFUSED..... ☐ 9

**E08.** During the past 30 days, did anyone smoke in indoor areas where you work?

YES..... ☐ 1  
 NO ..... ☐ 2  
 DON'T KNOW ..... ☐ 7  
 REFUSED..... ☐ 9

**E09.** During the past 30 days, did you visit any government building or government office?

YES..... ☐ 1  
 NO ..... ☐ 2 → **SKIP TO E21**  
 DON'T KNOW ..... ☐ 7 → **SKIP TO E21**  
 REFUSED..... ☐ 9 → **SKIP TO E21**

**E10.** Did anyone smoke inside any government building or government office that you visited in the past 30 days?

YES..... ☐ 1  
 NO ..... ☐ 2  
 DON'T KNOW ..... ☐ 7  
 REFUSED..... ☐ 9

**E21.** During the past 30 days, did you visit any universities?

YES..... ☐ 1  
NO ..... ☐ 2 → **SKIP TO E19**  
DON'T KNOW ..... ☐ 7 → **SKIP TO E19**  
REFUSED..... ☐ 9 → **SKIP TO E19**

**E22.** Did anyone smoke inside any of the universities that you visited in the past 30 days?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**E19.** During the past 30 days, did you visit any other schools or educational facilities?

YES..... ☐ 1  
NO ..... ☐ 2 → **SKIP TO EE1**  
DON'T KNOW ..... ☐ 7 → **SKIP TO EE1**  
REFUSED..... ☐ 9 → **SKIP TO EE1**

**E20.** Did anyone smoke inside any of the schools or educational facilities that you visited in the past 30 days?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**EE1.** During the past 30 days, did you visit any religious facilities?

YES..... ☐ 1  
NO ..... ☐ 2 → **SKIP TO E11**  
DON'T KNOW ..... ☐ 7 → **SKIP TO E11**  
REFUSED..... ☐ 9 → **SKIP TO E11**

**EE2.** Did anyone smoke inside any of the religious facilities that you visited in the past 30 days?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**E11.** During the past 30 days, did you visit any health-care facility?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO E13**

DON'T KNOW ..... ☐ 7 → **SKIP TO E13**

REFUSED..... ☐ 9 → **SKIP TO E13**

**E12.** Did anyone smoke inside any of the health-care facilities that you visited in the past 30 days?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**E13.** During the past 30 days, did you visit any restaurant?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO E25**

DON'T KNOW ..... ☐ 7 → **SKIP TO E25**

REFUSED..... ☐ 9 → **SKIP TO E25**

**E14.** Did anyone smoke inside any of the restaurants that you visited in the past 30 days?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**E25.** During the past 30 days, did you visit any bar or night club?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO E15**

DON'T KNOW ..... ☐ 7 → **SKIP TO E15**

REFUSED..... ☐ 9 → **SKIP TO E15**

**E26.** Did anyone smoke inside any of the bars or night clubs that you visited in the past 30 days?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**E15.** During the past 30 days, did you use any public transportation?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO EE3**

DON'T KNOW ..... ☐ 7 → **SKIP TO EE3**

REFUSED..... ☐ 9 → **SKIP TO EE3**

**E16.** Did anyone smoke inside any public transportation that you used in the past 30 days?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**EE3.** During the past 30 days, did anyone smoke inside any other public places while you were visiting?

YES..... ☐ 1 → **EE4.** Please specify: \_\_\_\_\_

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**E17.** Based on what you know or believe, does breathing other people's smoke cause serious illness in non-smokers?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

## SECTION F. ECONOMICS — MANUFACTURED WHITE CIGARETTES

IF [B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES DAILY OR LESS THAN DAILY)]  
AND  
[(B06a OR B10a) > 0 AND <= 888 (RESPONDENT SMOKES MANUFACTURED WHITE CIGARETTES)],  
THEN CONTINUE WITH THIS SECTION.  
OTHERWISE, SKIP TO NEXT SECTION.

**F01a.** The next few questions are about the last time you purchased manufactured white cigarettes for yourself to smoke.

The last time you bought manufactured white cigarettes for yourself, how many cigarettes did you buy?

[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]

CIGARETTES/STICKS ..... ☐ 1  
PACKS ..... ☐ 2  
CARTONS ..... ☐ 3  
OTHER (SPECIFY) ..... ☐ 4 → F01c. [SPECIFY THE UNIT]: \_\_\_\_\_  
NEVER BOUGHT CIGARETTES ..... ☐ 5 → **SKIP TO NEXT SECTION**  
REFUSED ..... ☐ 9 → **SKIP TO F03**

**F01b.** [ENTER NUMBER OF (CIGARETTES/STICKS/PACKS/CARTONS/OTHER)]

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**[IF F01a=CIGARETTES, GO TO F02]**  
**[IF F01a=PACKS, GO TO F01dPack]**  
**[IF F01a=CARTONS, GO TO F01dCart]**  
**[IF F01a=OTHER, GO TO F01dOther]**

**F01dPack.** Did each pack contain 20 cigarettes or another amount?

20 ..... ☐ 1  
OTHER AMOUNT .... ☐ 7 → F01dPackA. How many cigarettes were in each pack?  
REFUSED ..... ☐ 9  
**[GO TO F02]**

**F01dCart.** Did each carton contain 200 cigarettes or another amount?

200 ..... ☐ 1

OTHER AMOUNT .... ☐ 7 → F01dCartA. How many cigarettes were in each carton?

REFUSED ..... ☐ 9

**[GO TO F02]**

**F01dOther.** How many sticks were in each {OTHER}?

[IF REFUSED, ENTER 999]

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**[GO TO F02]**

**F02.** In total, how much money did you pay for this purchase?

[IF DON'T KNOW OR REFUSED, ENTER 999999]

--

**[RANGE: 100 – 500000]**

**F03.** What brand did you buy the last time you purchased manufactured white cigarettes for yourself?

MARLBORO ..... ☐ 1

LUCKY STRIKE ..... ☐ 2

DUNHILL ..... ☐ 3

PALL MALL ..... ☐ 4

KENT ..... ☐ 5

WINSTON ..... ☐ 6

MILD SEVEN ..... ☐ 7

OTHER ..... ☐ 8 → F03a. [SPECIFY BRAND]: \_\_\_\_\_

REFUSED ..... ☐ 99

**F04.** The last time you purchased manufactured white cigarettes for yourself, where did you buy them?

STORE ..... ☐ 2

STREET VENDOR ..... ☐ 3

DUTY-FREE SHOP ..... ☐ 5

OUTSIDE THE COUNTRY ..... ☐ 6

KIOSK ..... ☐ 7

FROM ANOTHER PERSON ..... ☐ 9

OTHER ..... ☐ 10 → F04a. [SPECIFY LOCATION]: \_\_\_\_\_

DON'T REMEMBER ..... ☐ 77

REFUSED ..... ☐ 99

## Section **FK**. Economics — kretek cigarettes

IF [B01 = 1 OR 2 (RESPONDENT CURRENTLY SMOKES DAILY OR LESS THAN DAILY)]

AND

[(B06c OR B10c) > 0 AND <= 888 (RESPONDENT SMOKES KRETEK CIGARETTES)],

THEN CONTINUE WITH THIS SECTION.

OTHERWISE, SKIP TO NEXT SECTION.

**FK01a.** The next few questions are about the last time you purchased kretek cigarettes for yourself to smoke.

The last time you bought kretek cigarettes for yourself, how many kretek cigarettes did you buy?

[ENTER UNIT ON THIS SCREEN AND NUMBER ON NEXT SCREEN]

KRETEK CIGARETTES/STICKS ..... ☐ 1

PACKS ..... ☐ 2

CARTONS ..... ☐ 3

OTHER (SPECIFY) ..... ☐ 4 → FK01c. [SPECIFY THE  
UNIT]: \_\_\_\_\_

NEVER BOUGHT KRETEK CIGARETTES ..... ☐ 5 → **SKIP TO NEXT SECTION**

REFUSED ..... ☐ 9 → **SKIP TO FK03**

**FK01b.** [ENTER NUMBER OF (KRETEK CIGARETTES/STICKS/PACKS/CARTONS/OTHER)]

--	--	--

**[IF FK01a=KRETEK CIGARETTES, GO TO FK02]**

**[IF FK01a=PACKS, GO TO FK01dPack]**

**[IF FK01a=CARTONS, GO TO FK01dCart]**

**[IF FK01a=OTHER, GO TO FK01dOther]**

**FK01dPack.** Did each pack contain 6 kretek cigarettes, 10 kretek cigarettes, 12 kretek cigarettes, 16 kretek cigarettes, 20 kretek cigarettes, or another amount?

6 ..... ☐ 1

10 ..... ☐ 2

12 ..... ☐ 3

16 ..... ☐ 4

20 ..... ☐ 5

OTHER AMOUNT ..... ☐ 7 → FK01dPackA. How many kretek cigarettes were in each  
pack?

REFUSED ..... ☐ 9

**[GO TO FK02]**



**FK01dCart.** Did each carton contain 60 kretek cigarettes, 100 kretek cigarettes, 120 kretek cigarettes, 160 kretek cigarettes, 200 kretek cigarettes, 320 kretek cigarettes, or another amount?

60..... ☐ 1

100..... ☐ 2

120..... ☐ 3

160..... ☐ 4

200..... ☐ 5

320..... ☐ 6

OTHER AMOUNT ..... ☐ 7 → FK01dCartA. How many kretek cigarettes were in each carton?

REFUSED..... ☐ 9

**[GO TO FK02]**

**FK01dOther.** How many kretek cigarettes were in each {OTHER}?

[IF REFUSED, ENTER 999]

--	--	--

**[GO TO FK02]**

**FK02.** In total, how much money did you pay for this purchase?

[IF DON'T KNOW OR REFUSED, ENTER 999999]

--

**[RANGE: 100 – 500000]**

**FK03.** What brand did you buy the last time you purchased kretek cigarettes for yourself?

SAMPOERNA ..... ☐ 1

GUDANG GARAM ..... ☐ 2

DJI SAM SOE ..... ☐ 3

DJARUM ..... ☐ 4

BENTOEL..... ☐ 5

WISMILAK..... ☐ 6

OTHER ..... ☐ 7 → FK03a. [SPECIFY BRAND]: \_\_\_\_\_

REFUSED..... ☐ 99

**FK04.** The last time you purchased kretek cigarettes for yourself, where did you buy them?

STORE..... ☐ 2

STREET VENDOR..... ☐ 3

DUTY-FREE SHOP ..... ☐ 5

OUTSIDE THE COUNTRY ..... ☐ 6

KIOSK..... ☐ 7

FROM ANOTHER PERSON ..... ☐ 9

OTHER ..... ☐ 10 → FK04a. [SPECIFY LOCATION]: \_\_\_\_\_

DON'T REMEMBER..... ☐ 77

REFUSED..... ☐ 99

## SECTION G. MEDIA

---

**G201intro.** The next few questions ask about your exposure to the media and advertisements in the past 30 days. For each item, I am going to ask separately about white cigarettes and kretek cigarettes.

**G201a.** In the past 30 days, have you noticed any information in \*newspapers or in magazines\* about the dangers of use or that encourages quitting of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G201b**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G201b.** In the past 30 days, have you seen any information on \*television\* about the dangers of use or that encourages quitting of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G201c**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G201c.** In the past 30 days, have you heard any information on the \*radio\* about the dangers of use or that encourages quitting of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G201d**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G201d.** In the past 30 days, have you noticed any information on \*billboards\* about the dangers of use or that encourages quitting of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G201e**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G201e.** In the past 30 days, have you noticed any information \*somewhere else\* about the dangers of use or that encourages quitting of the following tobacco products?

1. White cigarettes?

[DO NOT INCLUDE HEALTH WARNINGS ON CIGARETTE PACKAGES]

YES..... ☐ 1 → a. Please specify where: \_\_\_\_\_  
NO ..... ☐ 2  
REFUSED..... ☐ 9

2. Kretek cigarettes?

[DO NOT INCLUDE HEALTH WARNINGS ON KRETEK PACKAGES]

YES..... ☐ 1 → a. Please specify where: \_\_\_\_\_  
NO ..... ☐ 2

REFUSED..... ☐ 9

**G202.** In the past 30 days, did you notice any health warnings on white cigarette or kretek packages?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO G204a**

DID NOT SEE ANY CIGARETTE PACKAGES ..... ☐ 3 → **SKIP TO G204a**

REFUSED..... ☐ 9 → **SKIP TO G204a**

**G203.** **[ADMINISTER IF B01 = 1 OR 2. ELSE GO TO G204a]**

In the past 30 days, have warning labels on white cigarette or kretek packages led you to think about quitting?

YES..... ☐ 1

NO ..... ☐ 2 → **SKIP TO GG2**

DON'T KNOW ..... ☐ 7 → **SKIP TO GG2**

REFUSED..... ☐ 9 → **SKIP TO GG2**

**GG1.** Would you say that the warning labels led you to think about quitting a lot or a little?

A LOT ..... ☐ 1

A LITTLE ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**GG2.** In the past 30 days, did the warning labels make you concerned or think about the dangers of smoking cigarettes on health?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**G204a.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products in \*stores where the products are sold\*?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204b**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204b.** In the past 30 days, have you seen any advertisements or signs promoting the following tobacco products on \*television\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204c**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204c.** In the past 30 days, have you heard any advertisements promoting the following tobacco products on the \*radio\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204d**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204d.** In the past 30 days, have you noticed any advertisements promoting the following tobacco products on \*billboards\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204e**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204e.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products on \*posters\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204f**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204f.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products in \*newspapers or magazines\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204g**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204g.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products in \*cinemas\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204h**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204h.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products on the \*Internet\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204i**



REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

REFUSED..... ☐ 9

**G204i.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products on \*public transportation vehicles or stations\*?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204j**

REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

REFUSED..... ☐ 9

**G204j.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products on \*public walls\*?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204ja**

REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

REFUSED..... ☐ 9

**G204ja.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products on \*banners\*?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
NOT APPLICABLE ..... ☐ 7 → **SKIP TO G204k**  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G204k.** In the past 30 days, have you noticed any advertisements or signs promoting the following tobacco products \*anywhere else\*?

1. White cigarettes?

YES..... ☐ 1 → a. Please specify where: \_\_\_\_\_  
NO ..... ☐ 2  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1 → a. Please specify where: \_\_\_\_\_  
NO ..... ☐ 2  
REFUSED..... ☐ 9

**G205.** In the past 30 days, have you noticed any sport or sporting event that is associated with white cigarette brands or white cigarette companies?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G205a.** In the past 30 days, have you noticed any sport or sporting event that is associated with kretek brands or kretek companies?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G205b.** In the past 30 days, have you noticed any music, theatre, art or fashion event that is associated with white cigarette brands or white cigarette companies?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G205c.** In the past 30 days, have you noticed any music, theatre, art or fashion event that is associated with kretek brands or kretek companies?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G206a.** In the past 30 days, have you noticed distribution of any free samples of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G206b.** In the past 30 days, have you noticed any of the following tobacco products sold at sale prices?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G206c.** In the past 30 days, have you noticed any coupons for the following tobacco products?

1. White cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1  
NO ..... ☐ 2  
DON'T KNOW ..... ☐ 7  
REFUSED..... ☐ 9

**G206d.** In the past 30 days, have you noticed any free gifts or special discount offers on other products when buying any of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**G206e.** In the past 30 days, have you noticed any clothing or other item with a brand name or logo of the following tobacco products?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

**G206f.** In the past 30 days, have you noticed any promotion in the mail for the following tobacco products?

1. White cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

2. Kretek cigarettes?

YES..... ☐ 1

NO ..... ☐ 2

DON'T KNOW ..... ☐ 7

REFUSED..... ☐ 9

## SECTION H. KNOWLEDGE, ATTITUDES AND PERCEPTIONS

**H01.** The next question is about \*smoking\* tobacco.

Based on what you know or believe, does smoking tobacco cause serious illness?

YES..... ☐ 1  
 NO ..... ☐ 2  
 DON'T KNOW ..... ☐ 7  
 REFUSED..... ☐ 9

**H02.** Based on what you know or believe, does smoking tobacco cause the following...

	YES ▼	NO ▼	DON'T KNOW ▼	REFUSED ▼
a. Stroke (blood clots in the brain that may cause paralysis)? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
b. Heart attack? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
c. Lung cancer? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
d. COPD (chronic obstructive pulmonary disease)? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
e. Bladder cancer? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
f. Stomach cancer? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
g. Premature birth? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9
h. Bone loss? .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 7	<input type="checkbox"/> 9

**H03.** Based on what you know or believe, does using \*smokeless tobacco\* (such as chewing tobacco, inhaling tobacco powder and *sirih* with tobacco) cause serious illness?

YES..... ☐ 1  
 NO ..... ☐ 2  
 DON'T KNOW ..... ☐ 7  
 REFUSED..... ☐ 9

## END INDIVIDUAL QUESTIONNAIRE

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**I00.** Those are all of the questions I have. Thank you very much for participating in this important survey.

**I02.** [RECORD ANY NOTES ABOUT INTERVIEW:]

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## Appendix F: MPOWER Summary Indicators

Table F.1. MPOWER Summary Indicators, GATS Indonesia, 2011.

Indicator	Overall	Gender		Residence	
		Male	Female	Urban	Rural
<b>M: Monitor tobacco use and prevention policies</b> <sup>†</sup>					
Current tobacco use <sup>1</sup>	36.1	67.4	4.5	33.0	39.1
Current tobacco smokers <sup>1</sup>	34.8	67.0	2.7	31.9	37.7
Current cigarette smokers <sup>1,2</sup>	34.8	67.0	2.7	31.9	37.6
Current white cigarette smokers <sup>1</sup>	2.2	4.3	0.1	2.8	1.6
Current hand-rolled cigarette smokers <sup>1</sup>	4.7	9.0	0.5	2.4	7.1
Current Kretek cigarette smokers <sup>1</sup>	31.5	60.9	2.3	28.6	34.5
Current smokeless tobacco use <sup>1</sup>	1.7	1.5	2.0	1.2	2.2
Average number of cigarettes smoked per day <sup>2,3</sup>	12.8	13.0	8.1	12.3	13.3
Average age at daily smoking initiation among daily smokers of age 20-34 years	17.6	17.6	--	17.7	17.5
Time to first tobacco smoke within 30 minutes from waking	38.3	38.6	30.0	41.0	36.1
Former daily tobacco smokers among ever daily smokers <sup>4</sup>	9.5	9.0	23.2	11.4	7.9
<b>P: Protect people from tobacco smoke</b> <sup>†</sup>					
Exposure to secondhand smoke at home at least monthly <sup>5</sup>	78.4	81.4	75.4	68.5	88.2
Exposure to secondhand smoke at work <sup>6, ‡</sup>	51.3	58.0	41.4	47.8	62.4
Exposure to second hand smoke in public places <sup>‡</sup> :					
Government buildings/offices	63.4	69.4	55.4	58.6	71.2
Health care facilities	17.9	20.1	16.5	20.0	15.1
Restaurants	85.4	90.8	76.1	87.4	81.7
Public Transportation	70.0	79.0	62.4	70.2	69.6
<b>O: Offer help to quit tobacco use</b> <sup>7</sup>					
Made a quit attempt in the past 12 months <sup>8</sup>	30.4	29.8	44.6	35.9	25.6
Advised to quit smoking by a health care provider <sup>9</sup>	34.6	35.7	13.0	35.6	33.9
Attempted to quit smoking using a specific cessation method <sup>8</sup> :					
Quit without assistance	70.7	70.7	71.1	65.6	77.0
Counseling/advice <sup>10</sup>	7.0	6.6	13.1	8.5	5.2
Interest in quitting smoking <sup>11</sup>	48.8	48.9	45.8	50.6	47.2
<b>W: Warn about the dangers of tobacco</b> <sup>†</sup>					
Belief that tobacco smoking causes serious illness	86.0	85.7	86.3	88.1	83.8
Belief that smoking causes specific diseases:					
Stroke	45.5	46.6	44.4	55.0	35.9
Heart attack	81.5	82.9	80.0	85.4	77.4
Lung cancer	84.7	85.2	84.2	87.2	82.2
Chronic Obstructive Pulmonary Disease (COPD)	36.0	37.4	34.7	35.7	36.4
Premature birth	49.5	48.4	50.6	58.3	40.6
Belief that breathing other peoples' smoke causes serious illness	73.7	74.1	73.3	79.5	67.8
Noticed anti-cigarette smoking information at any location <sup>‡</sup>	52.7	57.1	48.3	64.3	41.0
Thinking of quitting because of health warnings on cigarette packages	27.1	27.5	17.0	27.9	26.3
<b>E: Enforce bans on tobacco advertising, promotion, and sponsorship</b> <sup>†</sup>					
Noticed any cigarette advertisement, sponsorship or promotion <sup>‡</sup>	84.6	91.1	78.2	89.7	79.5
Noticed any cigarette marketing in the stores where cigarettes are sold <sup>‡</sup>	45.6	53.4	37.8	51.4	39.7
<b>R: Raise taxes on tobacco</b> <sup>12</sup>					
Average kretek cigarette expenditure per month (Rp) <sup>@</sup>	369,947.68	373,809.40	178,263.37	351,424.38	384,751.32
Average price paid for a pack of 20 kretek cigarettes (Rp) <sup>@</sup>	12,718.91	12,753.22	11,019.85	14,095.10	11,614.66
Last kretek cigarette purchase was from a store	17.6	17.4	21.8	19.4	16.0

### Footnotes:

<sup>1</sup> Current use includes both daily and occasional (less than daily) use.

<sup>2</sup> Cigarette use includes white cigarettes, hand-rolled cigarettes, and kretek cigarettes.

<sup>3</sup> Among current cigarette smokers.

<sup>4</sup> Also known as the quit ratio for daily smoking.

<sup>5</sup> Adults reporting that smoking inside the home occurs daily, weekly, or monthly.

<sup>6</sup> Among those respondents who work outside of the home who usually work indoors or both indoors and outdoors.

<sup>7</sup> Among current smokers (includes both daily and occasional smokers).

<sup>8</sup> Among current smokers and former smokers who have been abstinent for less than 12 months.

<sup>9</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>10</sup> Consultations in health care facilities, including specialized offices on how to quit smoking.

<sup>11</sup> Interest in quitting smoking includes current smokers who are planning to quit within next month, thinking about quitting within next 12 months, and who will quit someday, but not in the next 12 months.

<sup>12</sup> Among current manufactured cigarette smokers.

<sup>†</sup> Among all adults.

<sup>‡</sup> In the last 30 days.

<sup>@</sup> Indonesian Rupiah

<sup>\*\*</sup> Indicator estimate based on less than 25 un-weighted cases and has been suppressed



Global Adult Tobacco Survey: Indonesia Report 2011 summarizes the findings of Global Adult Tobacco Survey on tobacco control indicators and thus fulfils its obligation under MPOWER policy package to monitoring tobacco control in Indonesia



## GLOBAL ADULT TOBACCO SURVEY: INDONESIA REPORT 2011

### COLLABORATING ORGANIZATIONS

Ministry of Health  
Badan Pusat Statistik (BPS-Statistics Indonesia)  
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