# GLOBAL ADULT TOBACCO SURVEY(GATS)

## THE REPUBLIC OF KAZAKHSTAN, 2014

## COUNTRY REPORT

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**Ministry of Healthcare and Social Development of the Republic of Kazakhstan**
**RSE «NATIONAL CENTRE FOR PROBLEMS OF HEALTHY LIFESTYLE DEVELOPMENT»**

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**GATS, the first national survey conducted at the level of international standards in the Republic of Kazakhstan, used a standard protocol and electronic system for collecting information. Most importantly, the survey covered the entire country, including the most remote areas, thereby creating a basis for further research on public health and health care in Kazakhstan. I am sure that this survey will contribute to the effective monitoring and combating of the tobacco epidemic, thereby saving lives that would have been lost due to tobacco use.**

The Global Adult Tobacco Survey (GATS) Kazakhstan Country Report was finalized in 2014. The Republic of Kazakhstan now has in place a system of surveillance and evaluation, an integral part of tobacco prevention and control measures. The development of this system, which is the obligation of all countries participating in the World Health Organization (WHO) Framework Convention on Tobacco Control, was signed by the Republic of Kazakhstan in 2006.

Tobacco use is a great public health problem, leading to significant negative consequences for population health and the national economy. Thus, data on tobacco use is critical to effectively fighting the tobacco epidemic. The GATS Kazakhstan, 2014 report provides the necessary information to monitor tobacco use and other important indicators that in turn allow for the development of appropriate tobacco control policy and programs in the Republic of Kazakhstan (RK).

The survey on tobacco use in Kazakhstan, which was carried out in accordance with international requirements, was the result of long-term work with the WHO regional Office for Europe (Copenhagen, Denmark), the US Centers for Disease Control and Prevention (CDC) (Atlanta, USA), the WHO Country Office (Astana, Kazakhstan), the Ministry of Healthcare and Social Development of the Republic of Kazakhstan (Astana, Kazakhstan), the Committee on Statistics of the Republic of Kazakhstan (Astana, Kazakhstan) and the National Centre for Problems of Healthy Lifestyle Development (NCPHLD, Almaty, Kazakhstan). Under the Ministry of Healthcare and Social Development, a working group was established to coordinate the survey. Following a methodology set forth by the WHO and CDC, the GATS used modern methods, employing a standard international questionnaire adapted to the country's social, economic, and demographic characteristics. A multistage stratified sample of households was used for the household survey, after which individuals aged 15 years or older were randomly selected from the households.

The study was conducted by the NCPHLD, Ministry of Healthcare and Social Development, and the Information Computing Center of the Committee on Statistics RK.

One of the main advantages of this study is that it provides internationally comparable and reliable estimates of tobacco use and tobacco prevention and control measures. Major results of the survey will form the basis of public policy and national programs to promote public health and protect the population from tobacco use and exposure to tobacco smoke.

***Duissenova T.K., the Minister of Healthcare and Social Development of the Republic of Kazakhstan***

Kazakhstan demonstrates the political will to strengthen tobacco control, the application of measures that reduce the demand for tobacco products, and the implementation of effective national tobacco prevention strategies that save lives.

An effective tool to achieve progress in the implementation of tobacco prevention and control policies in Kazakhstan is the WHO Framework Convention on Tobacco Control (FCTC). Along with the 179 other countries that have ratified the WHO FCTC, Kazakhstan has successfully fulfilled its international obligation to implement tobacco control measures for the benefit of public health that it accepted in 2006 by signing the law «On ratification of the WHO Framework Convention on Tobacco Control.»

For the first time in Kazakhstan, a scientific survey with international participation has been implemented that addresses strategies for monitoring of tobacco use and prevention strategies that are incorporated in the MPOWER package. Monitoring has to be conducted continuously at intervals every 3 to 5 years and is crucial to tobacco control efforts.

In accordance with the WHO MPOWER strategy and for the implementation of the State Programme for Healthcare Development «Salamatty Kazakhstan» for 2011-2015, Kazakhstan is conducting surveillance and effective and systematic monitoring of risk factors for noncommunicable diseases, including the prevalence of tobacco use. Thus, for the first time, the Republic of Kazakhstan has become a member of the Global Tobacco Surveillance System.

The National Centre for Problems of Healthy Lifestyle Development has conducted this unique survey in accordance with international protocols and standards, which allowed us to obtain representative data on tobacco consumption of the adult population and to identify factors associated with tobacco use.

Considering this, we express our gratitude for the cooperation and partnership, methodological support, and technical assistance rendered to the Ministry of Healthcare and Social Development of the Republic of Kazakhstan, the Committee on Statistics of the Republic of Kazakhstan, and the Information Computing Centre of the Committee on Statistics RK, the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC, USA), and the CDC Foundation, and we look forward to further fruitful cooperation to counter the worldwide tobacco epidemic.

***Director of the National Centre for Problems of Healthy Lifestyle Development, Ministry of Healthcare and Social Development, Professor Zh.E. Battakova, D.M.S.***

The Global Adult Tobacco Survey (GATS) Kazakhstan, 2014 is the first survey of its kind conducted in the Republic of Kazakhstan to monitor tobacco consumption using a nationally representative survey of households and adults aged 15 years or older from the selected households.

This study was conducted with the technical assistance of the CDC Foundation, the Centers for Disease Control and Prevention (both in Atlanta, USA) and the European Regional Office of the World Health Organization (WHO EURO).

The main purposes of this study were to obtain estimates of tobacco use, secondhand smoke exposure, and the frequency of attempts to quit smoking while also monitoring the effectiveness of interventions put in place to prevent and control tobacco use.

I hope that the data obtained from the survey will contribute to the development of strategic measures to reduce tobacco use in Kazakhstan.

I express gratitude to the RSE Information Computing Centre of the Committee on Statistics RK, its supervisors, and interviewers for the successful completion of the field work as well as to international experts from the CDC Foundation, CDC, WHO EURO, and the WHO Country Office in Kazakhstan for their assistance in conducting the GATS.

***Mr. Smailov Alikhan Askhanovich***
***Chairman of the Committee on Statistics of the Republic of Kazakhstan***

The Republican State Enterprise (RSE) Information Computing Centre (ICC) of the Committee on Statistics RK has been one of the key implementing agencies in the Global Adult Tobacco Survey (GATS) for the Republic of Kazakhstan, and thus the ICC expresses its sincere gratitude to the Centers for Disease Control and Prevention (Atlanta, USA) and the Regional Office for Europe of the World Health Organization (WHO) for providing financial and technical support for the survey and giving an opportunity for Kazakhstan to join the number of countries participating in the GATS.

The conduct of this survey was made possible through the participation of international experts from the CDC Foundation (Atlanta, USA), CDC, WHO EURO, and the WHO Country Office in Kazakhstan, all of whom provided clear coordination of the survey and shared their professional experience on implementation of the survey.

At the same time, we would like to extend our thanks to the national team, including the ICC of the Committee on Statistics RK, the regional supervisors, and the interviewers who participated in the preparation and collection of pretest data and the full fieldwork, thus ensuring successful completion of the first phase of the study. We are grateful to all the residents of Kazakhstan who agreed to be interviewed and thus participated in the study.

***Mr. Kazganbayev Eldar Shamilyevich***
***Director of Information and Computing Center***
***Committee on Statistics of the Republic of Kazakhstan***

On behalf of the WHO Regional Office for Europe, I congratulate Kazakhstan for conducting the Global Adult Tobacco Survey (GATS). The GATS survey gives us a clearer picture of the tobacco epidemic in Kazakhstan,which will be complemented by the Global Youth Tobacco Survey in 2015. These surveys use standard protocols to allow international comparisons to enable information sharing and learning from national and international expertise in tobacco control across the Region and beyond. The GATS marks a milestone, and its findings have the potential to inform next steps for tobacco prevention and control in Kazakhstan in order to meet the global voluntary target of a 30% relative reduction in tobacco use by 2025.

Globally, tobacco use is the leading cause of preventable deaths. The proportion of deaths in Kazakhstan attributable to tobacco use is almost 35% for men and 12% for women. This is among the highest death rates due to tobacco use in the Region. Tobacco use in Kazakhstan is high particularly among men. While smoking prevalence is currently relatively low among women, targeted policy interventions might be needed in order to keep this status.

In recent years, the Government of the Republic of Kazakhstan has undertaken remarkable efforts in the area of tobacco prevention and control.The recently introduced strong graphical warnings on cigarette packs have been noticed by nearly all smokers and are effective in making smokers think about quitting. Additionally, changes in the standard routines of primary health care providers have successfully led health care providers to ask about the smoking status of their patients and to provide cessation advice. However, more can and needs to be done in order to protect people from tobacco and help smokers quit.

The GATS survey shows that people in Kazakhstan remain exposed to secondhand smoke at work and when visiting public places, despite a law partially prohibiting smoking in certain public spaces. This indicates varying enforcement of the regulations and the limitation of partial smoke-free policies. More comprehensive measures for protection from harmful consequences of tobacco smoking for the people of Kazakhstan will require collaboration across all levels of government and across society, as supported by the Health 2020 policy framework for Europe.

I am confident that the results presented in this report will provide a strong foundation to continue and strengthen effective steps in tobacco prevention control in Kazakhstan. We value the strong leadership of the Ministry of Healthcare and Social Development and the excellent cooperation between the national and international partners.

I hope that the experiences learned can empower public health policy, planning, and practice to address the tobacco epidemic in Kazakhstan, and will be fruitfully employed for regularly repeated tobacco surveillance and policy monitoring. The GATS findings show that strong tobacco control measures in line with the WHO Framework Convention on Tobacco Control have strong support amongst the people in Kazakhstan. The WHO Regional Office for Europe is committed to continue to support the efforts of Kazakhstan in tobacco prevention and control.

***Zsuzsanna Jakab***
***WHO Regional Director for Europe***

On behalf of the U.S. Centers for Disease Control and Prevention's (CDC) Office on Smoking and Health, we congratulate Kazakhstan on publishing its first Global Adult Tobacco Survey (GATS) country report. A historic accomplishment, this report demonstrates Kazakhstan's commitment to standardized global surveillance to track adult tobacco use and key tobacco control indicators. This report has great potential to further improve tobacco use prevention and control efforts in the country supported by the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) and MPOWER measures.

Tobacco use is prevalent in Kazakhstan and its citizens are facing serious consequences from widespread smoking. Overall, 2.8 million (22.4%) adults currently smoke tobacco, with the burden primarily falling on males—42.4% of men currently smoke tobacco compared to 4.5% of women. Additionally, among those who do smoke daily, cigarette consumption is noteworthy at an average of 14.9 cigarettes smoked per day (15.2 for men; 11.8 for women). But there is encouraging news: 6 in 10 current smokers planned to or were thinking about quitting tobacco. Kazakhstan is at a pivotal point in their fight against the tobacco epidemic and has the opportunity to harness these findings to prevent unnecessary tragedy and suffering.

Tobacco use still remains one of the biggest challenges our world faces in public health, killing 6 million people annually worldwide. Projected to kill over 8 million people per year by 2030, 80% of these deaths will occur in low- and middle-income countries. Addressing tobacco use in Kazakhstan will require strong commitment to high-level achievement, including implementation and enforcement, of the WHO MPOWER measures— Monitor tobacco use and prevention policies; Protect people from tobacco smoke; Offer help to quit tobacco use; Warn about the dangers of tobacco; Enforce bans on tobacco advertising, promotion and sponsorship; and Raise taxes on tobacco. These six evidence-based strategies have proven their success and can help advert unnecessary illness and death.

With the GATS findings, Kazakhstan is now well-positioned to inform, support and scale-up tobacco control

measures and policies that benefit the health of their citizens. Kazakhstan has the opportunity to take bold steps in combating the tobacco epidemic by continuing to accelerate implementation of their tobacco control measures, especially around educational mass media campaigns and tobacco taxation strategies.We would like to thank the National Center for Problems of Healthy Lifestyle Development, Ministry of Healthcare and Social Development, Republic of Kazakhstan and the Information Computing Center (ICC) of the Committee on Statistics of the Republic of Kazakhstan for their leadership in making GATS a success.

CDC, as a partner, is confident that Kazakhstan will continue to be a leader among all countries in tobacco control and prevention and that the information generated will strengthen the progress in country and around the world.

***Samira Asma DDS, MPH***
***Chief, Global Tobacco Control Branch***
***Office on Smoking and Health***
***Centers for Disease Control and Prevention***

# *EXECUTIVE SUMMARY*

The Global Adult Tobacco Survey (GATS) conducted in the Republic of Kazakhstan (RK) in 2014 was a nationally representative household survey of the adult population aged 15 years or older that provided information on the prevalence of tobacco use and key tobacco control measures. Results of this survey provide a baseline for measuring national progress in tobacco control and can support the RK in its efforts to fulfill its commitments under the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), with the goal of better protecting the republic's population from the harmful consequences of tobacco use.

The standard methodology and the uniform questionnaire used in the GATS Kazakhstan 2014 enables valid international comparisons to be made on tobacco use and measures for tobacco control. In the survey, a multi-stage, geographically clustered sample design was used to obtain the key indicators for the country as a whole as well as by place of residence (urban / rural) and gender. In all, 4,451 households of the 4,611 households selected, or 96.5%, participated in the survey, with 2,229 (95.2%) of the selected urban households and 2,222 (97.9%) of the selected rural households participating. In total, 4,425 persons from the 4,451 participating households completed the GATS individual survey. The percentages of the chosen urban and rural respondents who completed the survey were nearly the same (99.4% and 99.5%, respectively). Just 26 people (0.6%) accounted for the small rate of nonresponse for the individual survey, with the explanations including refusal, absence, and incapability. Overall, 2,085 men and 2,340 women completed the survey. After weighting, the percentages for men and women were 47.2% and 52.8%, respectively. The overall response rate was 96.7%.

The GATS Kazakhstan 2014 provides national estimates on the use of tobacco products, smoking cessation, exposure to secondhand smoke, economics, and exposure to media, as well as information on the knowledge, attitudes, and beliefs of the republic's adults. The GATS was coordinated by the Ministry of Healthcare and Social Development (MoHSD) of the RK and conducted by the National Centre for Problems of Healthy Lifestyle Development (NCPHLD) and the Information Computing Centre (ICC) of the Committee on Statistics of the RK. Technical assistance was provided by the WHO and by the Centers for Disease Control and Prevention (CDC), USA. Funding for the survey was provided by the Bloomberg Initiative to Reduce Tobacco Use, a program of Bloomberg Philanthropies, and the Ministry of Healthcare and Social Development of the RK.

**Tobacco Use.** The survey found that 22.4% of the population of interest were current smokers (42.4% of men and 4.5% of women), representing 2.8million people (2.5 million males and 300.8 thousand females). In all, 19.1% of the population (about 2.4 million people) were daily smokers, 36.9% of males (1.2 million people) and 3.2% of females (210.9 thousand). The proportion of the population that were occasional smokers was 3.3% (414.7 thousand people), with 5.5% of males (324.9 thousand people) and 1.4% of females (89.9 thousand) in this category. The most common type of smoked tobacco products was manufactured cigarettes, at 22.2% (2.8 million people). In all, 2.1% of the population (266.2 thousand people) smoked hand-rolled cigarettes, 2.9% (363.9 thousand people) used hookah, 2.9% (371.1 thousand) used other smoked tobacco products, and 1.7% smoked electronic cigarettes.

By age group, middle-aged adults had the highest prevalence of smoking: 29.4% for adults aged 25-44 years and 24.5% for those aged 45-64. The prevalence of smoking manufactured cigarettes among people with a college education or above was 23.6%, while for those with a secondary technical education it was 30.7%. By residence, the percentage of current smokers of any tobacco products was lower in rural areas (18.2%) than in urban ones (25.6%).

Although the level of smokeless tobacco use in Kazakhstan (1.3%) was quite low, it was still higher than the prevalence found in other GATS surveys in the European Region, where prevalence ranged between 0.2% and 0.6%. The study found that 0.4% of adults in the RK used smokeless tobacco every day, and 0.9% used it occasionally. Every user of smokeless tobacco products among the surveyed population was a man, and the prevalence among men was 2.8%. Among current users, those aged 65 years or older had the highest prevalence at 8.8%, far higher than the rates for younger groups. Prevalence was higher in rural areas (4.0 %) than in urban areas (1.2%).

Just over three-fourths (77.6%) of the population were currently nonsmokers (9.8 million people), with a far higher prevalence for females 95.5% (6.4 million), than for males 57.6% (3.4 million people). Almost three-fourths of the population (72.0%) had never smoked, with this percentage almost twice as high among women (92.3%) as among men (49.2%).

On average, current daily cigarette smokers smoked 14.9 cigarettes per day; the figures were 15.2 for males and 11.8 for women. Of current daily smokers, essentially half (50.9%) smoked tobacco within a half hour after waking up, indicating a high level of nicotine dependence. The most common age range among ever daily smokers for initiating daily smoking was 17-19 years (43.9% overall,43.1% of males and 48.9% of females). The survey found that 36.1%

of daily smokers started smoking every day at an older age (20 + years); only 7.4% initiated daily smoking before the age of 15.

**Cessation.** Approximately 3 in 10 (29.5%) people in the group comprised of past-year smokers (current tobacco smokers and recent quitters (abstinent less than 12 months)) had tried to quit smoking in the past 12 months, with estimates of 34.3% for women and 28.9% for men. Among this group, 23.4% had tried to quit smoking using pharmacotherapy, 10.2% with counseling/advice, 7.8% by switching to smokeless tobacco, and 4.1% by using psychotherapy. The most common method, however, was attempting to quit without any assistance (76.5%; 77.0% of men and 72.7% of women).

Among past-year smokers, just over one-third (36.5%) had visited a health care provider in the past 12 months. Of this group, 59.0% had been asked if they smoked tobacco. This is considered an encouraging result, as in 2011 a system of national screening examinations was introduced in the RK among target population groups to identify risk factors and noncommunicable diseases. The GATS also found that among past-year smokers who had visited a health care provider in the last 12 months, 46.6% received advice on smoking cessation.

An estimated 63.9% of current smokers had shown an interest in smoking cessation (3.6% were planning to quit within the next month, 12.6% were thinking about quitting in the next 12 months, and 47.7% would like to quit, but not in the next 12 months). The survey found that 18.2% of current smokers were not interested in cessation. The fraction of ever daily smokers who had quit daily smoking and were now nonsmokers was relatively low at 12.9%.

**Exposure to tobacco smoke.** Among all adults who worked indoors, 19.0% (1.2 million) had been exposed to tobacco smoke at their workplace in the last 30 days; this percentage was 13.4% (617 thousand) for nonsmokers.

In all, 13.8% (1.6 million) of the adult population was exposed to tobacco smoke at home. Among adults who had visited various public places in the last 30 days, 9.9% were exposed to tobacco smoke in government buildings, 17.2% in private workplaces, 9.7% in health care facilities, 7.8% in schools, 24.1% in colleges/universities, 27.6% in restaurants, 70.4% in bars and nightclubs, 29.7% in cafes and cafeterias, and 18.1% in public transport.

Just over three-fourths (77.2%) of Kazakhstan adults supported the enactment of a total ban on smoking in all indoor workplaces and indoor public places, with the adoption of such measures supported by 85.3% of nonsmokers.

**Economic aspects.** The average amount spent for 20 manufactured cigarettes was 221.4 tenge; the survey found that smokers of manufactured cigarettes spent an average of 4,244.5 tenge per month on these cigarettes. Males (4,420.4 tenge per month) spent significantly more than females (2,602.6 tenge). Using 2014 figures for gross domestic product (GDP), 100 packs of manufactured cigarettes cost 1.0% of per capita GDP. Among smokers of manufactured cigarettes, 85.2% purchased their cigarettes from a store and 5.2% purchased them from street vendors or at a market, 3.8% from a kiosk, and 3.6% at a gas station.

The data above reveal that in 2014 in the Republic of Kazakhstan, the total cost of tobacco was extremely low in comparison with the costs in the Russian Federation and other countries of the WHO European Region [1]. Notably, a relatively high percentage of adults (65.2%) indicated they would favor increasing taxes on tobacco products.

**Media.** About a third of adults, (34.6% overall, 32.7% of males and 36.4% of females) had noticed information on the dangers of smoking during the last 30 days on television or radio, with estimates of 33.2% (31.1% of males and 35.0% of females) for television but not radio and 7.6% for radio but not television. The proportion of adults who had noticed anticigarette information in newspapers and magazines was 29.9% (27.5% of males and 32.0% of females), while the overall estimate for billboards was 20.7%.

In 2011, the national government approved the introduction of pictorial health warnings on cigarette packages, and this policy came into force in April 2013 [19]. Almost all current smokers had noticed both the traditional health warnings and the pictorial health warnings (94.8% and 97.6%, respectively) on cigarette packages during the last 30 days. A little more than half of current smokers had thought about quitting because of the traditional health warnings (51.3%) and because of the pictorial health warnings (58.0%). The introduction of pictograms can have a beneficial effect on people's opinions about the dangers of cigarettes.

Noticing the marketing of cigarettes through advertising, sponsorship, and sales promotion of these products was measured using the last 30 days for a time frame and various places such as stores, television, radio billboards, newspapers, and the Internet. Despite the republic's ban on cigarette advertising [20], 25.7% of adults had noticed some form of advertising, sponsorship, or cigarette promotions in the last 30 days.

**Knowledge, attitudes, and beliefs.** Overall, 84.9% of the adult population believed that tobacco smoking causes serious diseases, but this was actually a lower percentage than that reported for other GATS countries in the European Region. By gender, the estimates were 90.1% for women but just 79.1% for men. Among current smokers, the overall estimate was only 73.0%. As for the idea that certain types of cigarettes could be less harmful than others, this was the belief of 15.1% of adults overall, but almost one-third (32.1%) of current smokers.

Surprisingly, in view of widespread publicity about its dangers, just 57.3% of current smokers believed that exposure to tobacco smoke causes severe disease in nonsmokers. Thus, efforts should be intensified to spread the message that secondhand smoking, i.e., breathing other people's smoke, causes serious illness in nonsmokers. In the general population, women were much more likely to be aware of the dangers of exposure to tobacco smoke for nonsmokers, at 81.5%, than were males, at 65.6%.

Essentially two-thirds (65.2%) of adults were in favor of increasing taxes on tobacco products, and 83.9% of adults approved of a total ban on tobacco advertising.

**Conclusions and recommendations.** The results of the GATS Kazakhstan 2014 provide reliable, timely information on key indicators of measures to control tobacco use; the results can inform decision makers and

responsible agencies to develop and adapt strategies that can control the use of tobacco products in the republic. The findings for many of the indicators of tobacco consumption underscore the importance of implementing effective measures to prevent and control tobacco use in Kazakhstan. Clearly, the population could benefit from better protection from tobacco smoke; the survey also shows that those who want to quit could benefit from help and advice from their primary health care provider. For the republic as a whole, it would be beneficial to increase awareness about tobacco use and exposure to tobacco smoke and the related health risks.

Based on the results from the GATS Kazakhstan 2014, the following strategies are recommended, [1]which have been proven to decrease tobacco use. These recommendations are consistent with WHO FCTC and MPOWER measures:

1. Continued strengthening and enforcement of policies is an effective strategy to reduce tobacco use, as set forth by the WHO FCTC and the MPOWER package, in order to achieve the global voluntary target of a 30% reduction in tobacco use by 2025.
2. Regular and sustainable surveillance and monitoring can provides policy-makers and other stakeholders accurate information to shape tobacco prevention and control policies, follow-up comprehensive indicators of tobacco use and evaluate the impact of tobacco control policies in accordance with the WHO FCTC, as well as ensures effective dissemination of the results among the general population, decision makers, nongovernmental organizations (NGOs) and civil society organizations (CSOs), and health and education professionals.
3. Media campaigns can help increase knowledge of the health hazards of all types of tobacco and exposure to secondhand smoke, and promote awareness for greater enforcement of the applicable laws. Therefore, informing about health impacts of tobacco is considered a key cost-effective intervention to reduce tobacco consumption, especially among smokers.
4. Cessation services can also help decrease tobacco consumption. Including services for quitting the use of tobacco products in the list of services to be provided at the primary health care level is an effective strategy to decrease consumption. Interventions that include brief advice from primary health care professionals, along with access to nicotine replacement therapy and other evidence-based pharmacotherapy also help to curb tobacco consumption among nonusers and enhance quitting among users.
5. Establishing toll-free easily accessible quitlines can help those who want to stop using tobacco.
6. Pictorial health warnings have been shown to significantly decrease smoking rates as well as preventing initiation from young people. Sustaining pictorial health warnings by regularly rotating them, and ensuring compliance with the law regarding warnings on packages of all types of tobacco products, including hookah and smokeless tobacco is a proven way to curb consumption.

Increasing tobacco prices is one of the most cost-effective interventions to reduce tobacco consumption. By continuing regular tax increases on all tobacco products, can not only discourage young people from initiating smoking, but can also increase government revenues. Such increases are in line with the commitment of the country to adopt WHO FCTC as a set of proven, evidence-based international standards applied in 180 countries.



*[1]The policy recommendations in this chapter are consistent with the recommendations from the WHO FCTC and MPOWER. These recommendations are not, however, necessarily those of the U.S. Centers for Disease Control and Prevention (CDC)*

# 1. INTRODUCTION

Tobacco use, which constitutes the world's leading preventable cause of premature death and disease, causes over 5 million deaths annually around the globe, with this number expected to rise to over 8 million by the year 2030 [1]. Unless the current trends are changed, the vast majority of these deaths are expected to occur in the developing world [1,2]. In Kazakhstan, the burden of tobacco use is very high: in 2004, the proportion of all deaths in the country that were due to smoking was 24%, twice the worldwide rate (12.0%) and about 50% higher than the rates in Eurasia and in the Russian Federation as a whole (both 16%). In addition, the number of deaths overall in Kazakhstan is 235 per 1000 population is well above the world average of 156 per 1,000. In Kazakhstan, losses in production due to premature mortality, when calculated as a percentage of gross domestic product (GDP), have been described by the World Health Organization (WHO) as the highest of any country in the world, at 7.8%. For the world as a whole, the WHO has estimated this proportion to be 2.0%, with much higher estimates of 6.5% for Eurasia and 6.7% for the Russian Federation [1,3].

Without question, having an efficient and systematic surveillance mechanism to monitor the current tobacco epidemicis one of the essential components of a comprehensive tobacco control program. The WHO-Tobacco Free Initiative (TFI) aims to reduce the global burden of disease and death caused by tobacco, thereby protecting present and future generations from the devastating health, social, environmental, and economic consequences of tobacco consumption and exposure to tobacco smoke. This can be accomplished by providing global policy leadership through the promotion of the WHO Framework Conventionon Tobacco Control (FCTC) and following the MPOWER package of tobacco policies as a key entry point to the FCTC. The FCTC encourages countries to adhere to the convention's principles, and the WHO-TFI program supports countries in their efforts to implement tobacco control measures through MPOWER [4, 5].

The Global Adult Tobacco Survey (GATS) is a household survey that was launched in February 2007 as a new component of the ongoing Global Tobacco Surveillance System (GTSS). The GATS enables countries to collect data on key tobacco control measures in the adult population; results can assist countries in the formulation, tracking, and implementation of effective tobacco control interventions, and countries will be able to compare results of their own survey with results from other countries implementing GATS [6].

Because of the high prevalence of smoking among the adult population in the Republic of Kazakhstan (26.5%, according to the fifth national survey in Kazakhstan, 2012 [7]), and the fact that tobacco is the main preventable cause of morbidity and mortality worldwide, the country's Ministry Healthcare and Social Development decided to conduct the GATS in 2012. In 2013, under the direction of the MoHSD, a working group was established to coordinate the GATS in Kazakhstan; its members included representatives of the WHO Country Office, the Vice-Minister of Healthcare and Social Development, director of the NCPHLD (National Centre for Problems of Healthy Lifestyle Development), and the director of the Information Computing Centre (ICC) in the Agency on Statistics in Kazakhstan.

The primary reasons for conducting the GATS in Kazakhstan were to: (a) strengthen the country's capacity for the development, implementation, and evaluation of prevention programs and tobacco control measures to reduce the burden of disease and death associated with tobacco; and (b) systematically monitor tobacco consumption as well as the measures used to protect the population through tobacco control.

Currently, the GATS is being implemented in numerous countries around the world. More than half of the world's smokers live in these countries, and they bear the highest burden of tobacco use. In phase 1 of GATS, 14 countries participated: Bangladesh, Brazil, China, Egypt, India, Mexico, Philippines, Poland, Russian Federation, Thailand, Turkey, Ukraine, Uruguay, and Vietnam.

In phase 2, six new countries took part─Argentina, Indonesia, Nigeria, Panama, Qatar, and Romania ─ while two countries, Thailand and Turkey, repeated their surveys from Phase 1. Phase 3 included seven countries: Other than Kazakhstan, they included Cameroon, Greece, Kenya, Pakistan, Senegal, and Uganda [6]. Thus, governments around the world are working together to implement GATS, with the support of three partner organizations: Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, USA; CDC Foundation (also in Atlanta), and RTI International.

## 1.1. Burden of Tobacco, Tobacco Consumption Patterns, and Trends in the Republic of Kazakhstan

The Republic of Kazakhstan (RK), which is located in the heart of Eurasia, is administratively divided into 14 oblasts and 2 cities of republican (national) significance. In addition, the city of Baikonur has the status of a federal city in the Russian Federation. The population of the RK is more than 17 million.

### 1.1.1. Trends in tobacco use

According to the WHO Report on the Global Tobacco Epidemic 2013, the prevalence of tobacco use among RK adults (aged 15-65 years) was 29.8% (48.0% among men, 12.1% among women) [1]. The prevalence of daily smokers was 21.0% (37.0% for men and 7.1% for women). Among young people, the prevalence of tobacco use was 9.9% overall (12.2% of males and 7.8% of females), and the rate of smokeless tobacco use in this population was 3.0% (males, 3.4%; females, 2.7%) [1].

In 2010-2011, the RK Multiple Indicator Cluster Survey (MICS) was implemented; the MICS focused on monitoring the situation of children and women in the country. In all, 15,800 households were surveyed, with 14,228 women and 4,043 men aged 15-59 years included. The MICS, which was conducted by the RK Committee on Statistics and UNICEF, produced several findings of interest: For example, use of any tobacco product was far more common among men (74%) than women (21%), and in the 15-49 age group 7.5% of women but 54% of men had smoked cigarettes or used some other tobacco product for 1 or more days in the last month. Among persons who currently smoked cigarettes, 9% of women and 34% of men had smoked more than 20 cigarettes in the last 24 hours [8].

In the RK, the prevalence of smoking was estimated through five national surveys conducted during 1998 to 2012. These surveys differed in several ways from the GATS, such as in the population surveyed and the formulation of the questions. For example, in previous national surveys, the respondents were aged 11 years or older, and they were asked whether they smoked cigarettes without specification of smoking status (i.e., current, daily, or periodic smoker). Most important, however, were differences in the sample design.

Taken as a whole, the five studies showed a slightly declining trend over the 14-year period. In 1998, the prevalence of smoking among adults was 28.0% (49.8% for men and 12.2% for women), while in 2012 the overall figure was 26.5%, 41.5% for males and 11.0% for females.

By region, in 2012, the prevalence of tobacco use in the North (the North Kazakhstan, Kostanai, Akmola, East Kazakhstan, Pavlodasrkaya, and Karagandinskaya oblasts plus the city of Astana) ranged from 28.6% to 30.3%, and in the South (the South Kazakhstan, Almaty, Kyzylorda, Aktobe, Atyrau, West Kazakhstan, and Mangistau oblasts and the city of Almaty) the estimates were from 22.7% to 26.4%. The regional differences can be explained by multiple factors, including climate/geography, ethnicity, and level of socioeconomic development [7, 9].

Thus, the GATS was the first survey in the country to study indicators of the use of various tobacco products by smoking status, and it will surely be of great importance in applying a methodology based on proven methods of obtaining reliable information on tobacco use and control.

### 1.1.2. Impact of tobacco use on economic performance

Notably, an earlier report from the WHO found that in 2004 in the RK, 24% of deaths were caused by smoking[2]. The most common causes of death included respiratory diseases, cancer, infectious diseases (tuberculosis ranked first), and diseases of the circulatory system.

According to WHO[2], in the RK, 40,026 adults in this country died from tobacco use per year; with an employment rate of 67.7% we can calculate that the labor force lost 27,097 employees per year. In years to come, it has been predicted that annual production losses due to premature mortality will be 7.8% of GDP[2].

In 2013, the excise duty on filtered cigarettes was 1550 tenge per 1,000 cigarettes, with this tax accounting for a minimum of 24% of the cost of cigarettes. In January 2014 the excise duty on filtered cigarettes increased to 3,000 tenge per 1,000 cigarettes (40% of the cost of the cheapest cigarettes), with further annual increases planned to 3,900 tenge (46%) in 2015 and 5,000 tenge (50%) in 2016 [10,11]. According to WHO estimates, increasing the excise tax to at least 60 tenge for a pack of 20 cigarettes (i.e., 3,000 tenge for 1,000 cigarettes) will save more than 182 thousand lives annually in the RK, including 95 thousand adults and 87.6 thousand young people. In addition, there will be a reduction of almost 20% in the rate of smoking among young people.

Considering both the impact on tax revenues and the greater economic activity produced by the decrease in the smoking rate, the state budget would be getting at least 49 billion tenge per year for meeting the social needs of the country [12]. A recent study found that in a single year, about 76 billion tenge was spent in the RK on the treatment of cancer, cardiovascular disorders, and other diseases. When one considers that the budget for treating cardiovascular disease can be reduced by 50% through the restriction of smoking, it is clear that successful programs to limit smoking can have great economic benefit [12].

### 1.1.3. Impact of tobacco use on public health

According to the WHO, over the next 15 years, 2 million people may die from tobacco-related diseases in the RK if the current rate of growth of the tobacco epidemic is not reduced [1]. Treatment of diseases or problems such as cancer, heart attacks, strokes, and the premature birth of infants is costly for smokers, nonsmokers exposed to SHS and the state [1].

In the RK, also according to the WHO, 84.0% of deaths in 2012 were caused by chronic or noncommunicable diseases [13]. Also in that year, the standardized mortality rate among men for cardiovascular disease was 800 per 100,000 [13]. It was established that, after high blood



[2]*WHO Regional Office for Europe grey literature from 2013 on tobacco use.*

pressure, the leading cause of morbidity and mortality from noncommunicable disease in the RK is tobacco smoking [13]. Studies by the scientific department of the NCPHLD examined the prevalence of behavioral risk factors that contribute to the development of noncommunicable diseases in the RK; according to the country's fifth national survey, which was conducted in 2012, there was a strong direct correlation (a correlation index of 0.7) between total morbidity and mortality due to cardiovascular disease and the prevalence of smoking in the RK [7].

## 1.2. Current Tobacco Control Policies in the Republic of Kazakhstan

Kazakhstan joined the FCTC in 2006, and the republic has committed itself to the implementation of the cross-sectorial measures outlined in the convention to protect people from tobacco smoke [14]. In 2009, the RK adopted a code on the health of the people and the health care system, which included a detailed statement on tobacco control (Article 159) [15].

The Ministry of Healthcare and Social Development and the NCPHLD are the two organizations in the RK that implement the science-based development of actions to prevent and control tobacco use, while also being responsible for producing nationally representative data on the key indicators of tobacco use in the republic. The code «On people's health and the health care system in the Republic of Kazakhstan» is the fundamental law that regulates relationships in the health care system. Section 6, Chapter 25, of this code has two articles related to the formation of a healthy lifestyle among the population: Article 153 addresses the issues of primary and secondary prevention of behavioral risk factors for disease and the early detection of diseases, and Article 159 discusses the basis for tobacco-use prevention and control.

Article 159, which was developed in 2009, builds on existing Law No. 340-II on the prevention and restriction of smoking and further reinforces the ban on smoking in certain public places and public transport. Smoking is prohibited in a variety of settings: educational institutions; organizations for minors; health care organizations; places of public catering, including bars, cafes, and restaurants; public places intended for recreation as well as museums, libraries, and lecture halls; in public transport, airports, railway, and riverboat stations; in government buildings and organizations; in indoor workplaces; and in doorways.

Exempt from this smoking ban are places allocated specifically for smoking, which must be equipped in accordance with the requirements of the existing legal acts in the field of sanitary and epidemiological welfare of the population. In places where smoking is banned, there should be signs prohibiting smoking.

The National State Program for Healthcare Development, «Salamatty Kazakhstan», for the period 2011-2015, was approved by Decree No. 1113 of the President of the RK dated November 29, 2010. The primary aims of this program are to strengthen inter-sectorial collaboration to promote healthy lifestyles and engage in the primary prevention of noncommunicable diseases, thereby reducing tobacco use [16].

The Order of the Ministry of Health RK, dated August 28, 2003 (No. 641), «On approval of sanitary requirements for arrangements keeping the designated smoking areas», specifies requirements for the equipment that must be present in smoking areas. In addition, hookah smoking in public places is prohibited by a resolution of the Chief Sanitary Inspector of the Ministry of Health RK [17].

The Code of the RK on Administrative Offences of January 30, 2001 (N 155) regulates the penalties for violations of the smoking ban. According to Articles 336-1 and 459 of this code, violation of the prohibition of smoking in certain public places is subject to a fine determined by the RK's monthly payments index (MPI). Repeated violation within a year after the initial violation requires the imposition of an administrative penalty, which entails a fine ranging from 2 to 5 MPI. Violation by an employer of the code's requirement to provide designated smoking areas, as well as not taking action to see that smoking is confined to these special places, entails a fine for an official in the amount of 10 MPI, and for legal entities, up to 40 MPI.

According to Article 459 of the code, smoking in prohibited places on trains and on ships of sea and river transport entails a fine ranging from 5 to 7 MPI. Smoking on board an aircraft, in the salons of buses, on minibuses for the transport of passengers, or on trolley buses, taxis,or in urban rail transport entails a fine ranging from 5 to 7MPI [18].

**Health warnings on tobacco packages.** The NCPHLD is the organization within the Ministry of Healthcare and Social Development RK that participated in the adoption of the technical aspects of the Government Resolution «On approval of the rules of placement on a pack of tobacco product, tobacco packaging, information about composition, levels of resinous substances, nicotine and systemic poisons, carcinogenic and mutagenic substances, and health warnings» dated November 22, 2011 (No. 1366). This resolution also regulates the placement of graphic warnings (pictograms) on tobacco packs and tobacco packaging [19]. On December 30, 2011, the Ministry of Health issued Order No. 933 «On the establishment of a working group on the development of technical requirements for the graphic images about the harm of smoking.» This resolution introduced the application of 12 pictograms on a pack of cigarettes in the RK. Tobacco factories completed application of the pictorial images to a cigarette pack by April 2013, and the pictograms have appeared on cigarette packs since that month.

**Bans on tobacco advertising, promotion, and sponsorship**. The RK's law on advertising of 2003 (as amended in June 2007 by the law on amending legislative enactments of advertising) is the main law in the republic regulating the advertising of tobacco products; it provides a general ban on the advertising of tobacco and tobacco products, which also includes the forms of sponsorship and promotion. In addition, the law prohibits the advertising of goods (works, services) with the elements of a trademark or name that is known as the name of tobacco or tobacco products [20].

The amending law of 2007 also amended the Code on Administrative Violations regarding the penalties resulting from the violation of the legislation on advertising and on the requirements regarding the information to be placed on tobacco and tobacco products.

**Tax legislation.** Currently, harmonization of customs duties and excise rates on tobacco is being implemented in several countries, member states of the Customs Union (CU), and by the Eurasian Economic Commission. The WHO recommendations for the achievement of raising in phases the excise tax rates to 91 euros per 1,000 cigarettes in 2020 are taken into account in the development of the road map for the period up to 2020.

The Law of the RK dated December 5, 2013 (No. 152-V) made amendments to the Tax Code RK, 2008, to increase the rates of excise duties on tobacco products. In 2014, unified excise tax rates on filtered cigarettes were increased by 94% compared with the year 2013 and became 3,000 tenge per 1,000 cigarettes, with a further increase of 30% per year by 2016 to reach a level of 5,000 tenge. Also in 2016, the rate of excise duties for non-filter cigarettes, cigarillos, cigars, and tobacco will be more than three times the level of excise taxes in 2013[11].

## 1.3. Survey Objectives

The main goals and objectives of the GATS Kazakhstan 2014 were as follows:

- Systematically monitor tobacco use (both smoking and smokeless) among adults and track key indicators of tobacco control using a nationally representative sample of the adult population of the Republic of Kazakhstan.
- Track the implementation of FCTC recommended policies outlined in the MPOWER package as part of national programs for controlling the tobacco epidemic and carrying out tobacco control campaigns in the Republic of Kazakhstan.

In particular, GATS Kazakhstan 2014 is expected to contribute to improvement in the republic's policies to counter tobacco use by determining the prevalence of tobacco use and ascertaining the knowledge levels and attitudes relative to tobacco use among different demographic groups in order to improve the efficiency of informational and education campaigns, as well as to provide assistance in quitting smoking.

# 2. METHODOLOGY

## 2.1. Target Group

The target population included all households in the republic and the residents of these households aged 15 years or older. Excluded from the survey were persons residing in hostels, boarding schools, orphan asylums and institutions for the elderly, country retreat homes, summer garden cottages, sports and tourist camps, motels, health resorts, vacation retreats, hospitals, boarding houses, guest houses, hotels, barracks, and other buildings and facilities designed for rest or for seasonal or temporary accommodation, irrespective of duration of stay.

## 2.2. Sample Design

Selection of respondents was based on a stratified three-stage cluster sampling design (for details see **Appendix B**). In the first stage of selection, the primary sampling units (PSUs) were "settlements" ranging from 50 to 8,226 households in rural areas and from 179 to 128,646 households in urban areas. Sampling units in the second stage of selection were residential household addresses taken from the National Housing Registry, which is continuously updated by the Agency on Statistics of the RK. In the third and final stage of sampling, one eligible resident was chosen at random at each address where the members of the household(s) living there agreed to participate in the survey. An important quantitative requirement of this design was to yield approximately 2,000 urban and 2,000 rural respondents and thereby a total respondent sample of 4,000 people. These goals were established in response to Kazakhstan's information goals for GATS, and they are in line with GATS requirements for surveys where estimates for the nation as a whole, by gender, and by urban/rural areas (but not by region of the country) are a priority [21].

## 2.3. Questionnaire

Both a household questionnaire and an individual questionnaire were administered. The questionnaires (see **Appendix E** for details) were based on the GATS Core Questionnaire with Optional Questions [22]. As a result of consultations between the NCPHLD and the US CDC and the WHO Regional Office for Europe, the questionnaires were adapted and modified according to the characteristics of the RK. The adapted questionnaire was approved by the Ministry of Healthcare and Social Development of the RK as well as the Questionnaire Review Committee, CDC. The questionnaire was developed in English and then translated into the Kazakh and Russian languages. In addition, to ensure the accuracy and quality of the translation the questionnaire was back-translated from the Russian and Kazakh languages into English. A section on informed consent was included separately in both the household and individual questionnaires.

The **household questionnaire** was designed to collect information on all adult residents (aged ≥15 years) in the household in order to randomly select an eligible respondent to complete the individual questionnaire. For each of the listed adult residents, information was collected on his/her age, date of birth (if applicable), gender, and smoking status.

The **individual questionnaire** was designed to collect data from randomly selected eligible males or females. This questionnaire had 11sections:

1. **Background characteristics:** These characteristics were obtained through questions on gender, age, education, employment, economic status, ethnicity, religious background, and marital status.
2. **Tobacco smoking:** Questions included those on the frequency of current tobacco use (daily, less than daily, not at all), tobacco use in the past, age of initiation of daily smoking, consumption of various tobacco products (cigarettes, hand-rolled cigarettes, pipes, cigars or cigarillos, hookah), nicotine dependence, and receiving advice / making attempts to quit.
3. **The use of hookah:** Questions addressed the use of this water pipe, duration and place of use, and type of tobacco used.
4. **Smokeless tobacco:** Questions included those on the frequency of current use (daily, less than daily, not at all), use of smokeless in the past, age of initiation of daily use, consumption of various smokeless products (nasvay, snuff, and chewing tobacco), and receiving advice / making attempts to quit.
5. **Electronic cigarettes:** Questions covered awareness and use of these products.
6. **Cessation:** The questions in this section pertained to attempts to quit smoking, receipt of advice to quit smoking from health professionals, and the methods used for smoking cessation.
7. **Secondhand smoke:** Questions pertained to the traditions of smoking at home, exposure to secondhand smoking at home, policies on smoking indoors in the workplace and exposure to tobacco smoking in the last 30 days in public places (in the workplace, government buildings, educational institutions, health-care organizations, restaurants, cafés, bars, clubs, and public transport, and knowledge about the dangers of secondhand smoke to nonsmokers.
8. **Economics:** Questions included those related to the

*[3] These numbers represent the ranges of size after settlements with fewer than 50 households were removed. The ranges of the number of households in a settlement for the complete listing of 8,835 settlements prior to censoring were as follows: 1 to 8,226 for rural areas and 2 to 128,646 for urban areas.*

respondent's last purchase of cigarettes, including the quantity, price, brand, place of purchase, and type purchased (with / without filter and light / low tar).

9. **Media:** In this section, the questions related to exposure to antismoking advertising information in the last 30 days in the media and in public places: newspapers / magazines, television, radio, billboards, somewhere else; marketing and sponsorship of cigarettes; and reaction to health warning labels on cigarette packages.
10. **Knowledge, attitudes, and perceptions:** Questions included those related to knowledge about the health effects of smoking and using smokeless tobacco. Questions addressed attitudes toward laws prohibiting smoking in certain places, laws to increase taxes on tobacco products, and the idea of a ban on all tobacco advertising.
11. **Pictorial health warnings:** Questions includes those related to noticing the new pictorial health warnings on cigarette packages and their influence on the thought of quitting.

## 2.4. Data Collection

### 2.4.1. Executing agency

In accordance with the memorandum of agreement with the CDC Foundation (Atlanta, Georgia, USA), the RSE ICC of the Committee on Statistics of the RK conducted the GATS in Kazakhstan. The survey had two phases: Phase one consisted of the training of personnel and preliminary testing (pretest); while phase two included full-fledged fieldwork, which incorporated the consideration of any comments on the pretest and the aggregation and delivery of raw data to the CDC and the NCPHLD.

### 2.4.2. Training

The central office staff of the ICC was trained in its home city of Astana by international experts from CDC and RTI International. Central office staff were trained on February 10 and 11, 2014, and their supervisors were trained from February 12 to 14. Interviewers for the pretest were trained on February 13-14, 2014; the pretest was conducted from February 16 through March 3, 2014. The interviewers were trained again on March 31 and Apri l1, 2014, and the fieldwork began the next day, April 2, 2014, and continued until April 30, 2014.

The training included an introduction to the programming of questionnaires using GATS GSS software, an explanation and testing of the questionnaire, setting up of the handheld iPAQs to make them usable for this survey, and quality assurance. The iPAQs were used for testing the questionnaire and adjustment of translation errors (in Russian and Kazakh versions) in the questionnaire and software menu. Four iPAQs were set up for the pretest and 46 iPAQs set up for the fieldwork. These handheld devices were also used for the training of supervisors.In addition, a case file was prepared for the pretest. During the training session the participants discussed and confirmed the mechanism for transferring the data from their supervisor to the central office, and the trainer (expert) demonstrated how to aggregate, transpose, monitor, and report data [23-25].

Training for both supervisors and interviewers was provided by the trained specialists of the central office of the ICC, with assistance provided by international experts from CDC and the WHO Country Office. The training, which followed an approved agenda, included the introduction of GATS objectives and expected outcomes; interviewing technique and conventions; a review of survey questions in the household and individual questionnaires; introduction to handheld devices; overview of the survey questions; using the iPAQ for the household questionnaire (both a demonstration and a round-robin exercise); review of the codes for both pending and final results (for both households and individuals); making records of calls; entry of result codes; data transfer; and quality assurance. To get used to working with the iPAQ, both supervisors and interviewers performed mock interviews [26, 27]. At the end of the training, all 16 regional supervisors passed a test and were prepared to train interviewers for fieldwork.

In 2013, and thus before the pretest, the questionnaire was adapted to the context of Kazakhstan and translated into the Russian and Kazakh languages. After approval by the Questionnaire Review Committee in Atlanta, the adapted version was uploaded to the handheld devices. The central office and representatives of the partners held a number of meetings to discuss, among other things, locations, the logistics of training seminars, the mechanism of data transfer, and the number of supervisors needed.

Fifty households in Astana and another 50 households in Kosshi village in Akmola oblast, a village located 20 kilometers from Astana, were selected for the pretesting, while another 40 households were reserved to allow for nonresponse. Respondents for the pretest were randomly selected in the 100 selected households, all of which were excluded from the case file for the full survey prepared by the Department of Registries and Publications of the Statistical Agency of Kazakhstan (Office for Sample Surveys) under technical assistance from CDC experts.

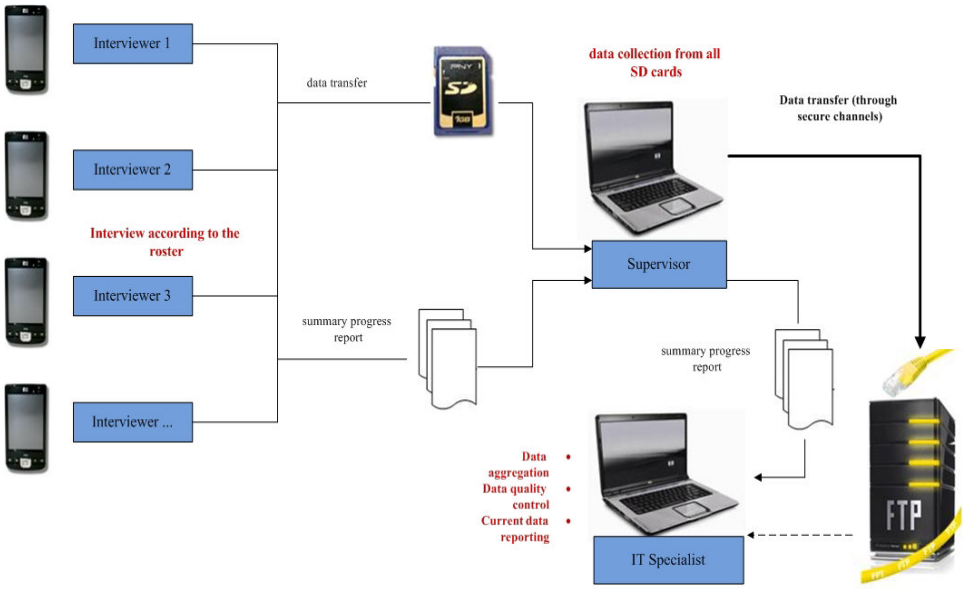
The survey team for the 100 households consisted of four people selected from the interviewers who were trained for the fieldwork in these regions. Each of the four were given 25 households to interview during a period of 16 days. It should be noted that the central team and each selected interviewer had been involved in similar activities in the past and had excellent communication skills, which facilitated the progress of the survey and had a positive impact on the outcomes. The regional supervisor was trained in advance and provided daily direct guidance, monitoring, and technical advice [28]. Four people in the central office undertook general coordination of the process. Interviewers were trained by supervisors at ICC regional branches in accordance with the approved agenda.

### 2.4.3. Data collection method

**Figure 1-1** demonstrates how the data were collected. Each interviewer forwarded data from her/his iPAQ and a summary report on the interviews to a supervisor. The

supervisor collected data from the interviewers, and each Tuesday and Thursday he/she sent data and summary report through a secure communication channel. The central office maintained communication with its regional branches through an Internet protocol (IP VPN) provided by the national company Kazsatnet. Among the other security measures employed was IPSec encryption in Juniper SRX240 firewalls. Following aggregation of data received from the regional offices, the central office prepared a weekly progress report to send to CDC.

**Figure 1.1. Data Collection Chart—GATS Kazakhstan, 2014.**




### 2.4.4. Confidentiality

Data collected in the course of a GATS are confidential, and participating personnelare responsiblefor maintaining the integrity and confidentiality of the data. All persons involved inthe Kazakhstan GATS signed a confidentiality statement with respect to any information received through the survey.

### 2.4.5. Fieldwork

Fieldwork was conducted from April 2 through April 30, 2014. In accordance with the statistical requirements for the study, 4,611 households were interviewed. The case file for the full survey was prepared by the Department of Registries and Publications of the Committee on Statistics of Kazakhstan (Office for Sample Surveys) under technical assistance from CDC experts. All interviewers were equipped with necessary documentation, guidelines, and IPAQs. Information about GATS was published on the website. To ensure the safety and efficiency of the interviewers, especially in rural areas, letters were sent to the local akimats (mayors). The survey was conducted in both Russian and Kazakh. Following the completion of the fieldwork, the response data were converted through the GSS aggregation module into a raw data format to enable data analysis.

## 2.5. Statistical Analysis

To improve the representativeness of the sample in terms of its size, distribution, and characteristics relative to the population involved in the study, sample weights were calculated for each respondent prior to data analysis. These weights were designed according to the standard procedures established in the GATS sample design [21] and sample weights[29] manuals. Determination of the sample weights involved three steps:

(1) A basic weight, or estimated weight, was calculated on the basis of random selection at all stages;

(2) An adjustment was made for uncollected data; and

(3) A post-stratification calibration adjustment was made to the final sample data to reflect the population of Kazakhstan aged ≥15 years by place of residence, gender, and age group. The final weights were used in all analytical work to estimate the parameters of the population, with 95% confidence intervals (CIs). Unless indicated otherwise, all tables in this report were created using weighted values.

A complex survey analysis was performed to obtain population estimates and 95% CIs. The analysis was performed employing two programs used for statistical analysis: SPSS version 21 and SAS version 9.3; standard errors (SEs) were calculated using Taylor series linearization (see **Appendix C** for details). Tests of statistical differences were performed by comparing the 95% CIs of the two estimates. In this report, the two estimates were considered statistically different, either higher or lower, only if the CIs did not overlap.

# 3. SAMPLE AND POPULATION CHARACTERISTICS

## 3.1. Sampling

Unweighted data on numbers, percentages, and response rates by residence are shown in Table 3.1. Out of 4,611 households selected for the survey, 4,451 (or 96.5%) households were participated, and 4,425 (99.4% of eligible persons) completed the interview successfully. By type of area (urban versus rural), the response rate was quite similar for households and almost identical for individuals.

A total of 26 people (0.6%) were counted as "nonresponse" due to refusal, absence,or lack of capability. The household response rate was 97.2%; the person-level response rate was 99.4%; and the total response rate was 96.7%.

**Table 3.1.Number and percentage of interviewed households and individual respondents, and response rate by residence (unweighted data) – GATS Kazakhstan, 2014.**

| | Residence | | | | Total | |
|---|---|---|---|---|---|---|
| | Urban | | Rural | | | |
| | Number | % | Number | % | Number | % |
| *Selected households* | | | | | | |
| Completed (HC) | 2,229 | 95.2 | 2,222 | 97.9 | 4,451 | 96.5 |
| Completed – not eligible (HCNE) | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 |
| Not completed (HINC) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| No one selected (HNS) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Nobody home (HNH) | 30 | 1.3 | 26 | 1.1 | 56 | 1.2 |
| Refusal (HR) | 58 | 2.5 | 11 | 0.5 | 69 | 1.5 |
| Unoccupied (HUO) | 12 | 0.5 | 10 | 0.4 | 22 | 0.5 |
| Selected address is not a household (HAND) | 11 | 0.5 | 0 | 0.0 | 11 | 0.2 |
| Other[1] (HO) | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Total selected households | 2,341 | 100 | 2,270 | 100 | 4,611 | 100 |
| Response rate (HRR)(%)[2] | 96.2% | | 98.4% | | 97.2% | |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Individual respondents* | | | | | | |
| Completed (PC) | 2,215 | 99.4 | 2,210 | 99.5 | 4,425 | 99.4 |
| Not completed (PINC) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Not eligible (PNE) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Nobody home (PNH) | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Refusal (PR) | 3 | 0.1 | 2 | 0.1 | 5 | 0.1 |
| Incapacitated (PI) | 10 | 0.4 | 10 | 0.5 | 20 | 0.4 |
| Other[1] (PO) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Total selected persons | 2,229 | 100 | 2,222 | 100 | 4,451 | 100 |
| Person response rate (PRR)(%)[3] | 99.4% | | 99.5% | | 99.4% | |
| Total response rate (TRR)(%)[4] | 95.6% | | 97.8% | | 96.7% | |

[1] – Other includes response codes not mentioned elsewhere.

[2] – Household response rate (HRR) is calculated as follows:((HC+HCNE)/(HC+HCNE)+HINC+HNS+NHH+HR+HO))*100

[3] – Person response rate (PRR) is calculated as follows:(PC/(PC+PINC+PNAH+PR+PI+PO))*100

[4] – Total response rate (TRR) is calculated as follows:(HRR x PRR)/100

Notes:

- Because not completing household interviews(i.e., the roster was not filled to the end) is not acceptable for GATS, such instances (HINC) are not entered into the roster of interviewed households.

- The total number of selected persons should equal the number of completed household interviews (HC).

- Completed personal interview (PC) includes interviews of those respondents who filled out at least the E01 question and who provided valid responses to the B01/B02/B03 questions (and C01/C02/C03, where applicable). Interviews of respondents who did not meet these criteria were treated as incomplete (PINC), and thus such instances were not entered into the roster of interviewed persons.

## 3.2. Respondents' Characteristics

The number of respondents was 4,425, and in 2013, the population aged ≥15 years in Kazakhstan was12,607,400 (**Table 3.2**). By gender, there were 2,085 male and 2,340 female respondents. The relative sizes of these numbers correspond very closely to the actual distribution of the male and female population, which was 47.2% and 52.8%, respectively, in 2013. By place of residence, in the unweighted population there were 2,215 urbanites and 2,210 persons from rural areas, but after weighting these numbers were in a far different proportion:7,130,800 for urban and 5,476,600 for rural. By age group, the unweighted number of respondents was 701 in the 15-24 group; 1,876 in 25-44; 1,327, 45-64; and 521, 65 or over. In terms of education, and using the unweighted numbers, there were 266 respondents who had completed primary education, 935 with a secondary education, 1,161 with a secondary education in a vocational school, and 1,354 with a higher level of education.

**Table 3.2. Distribution of respondents aged 15 years or older by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Characteristic | Weighted data | | Unweighted data |
|---|---|---|---|
| | Percentage (95% CI[1]) | Number of adults | Number of adults |
| **Total** | 100 | 12,607,400 | 4,425 |
| *Gender* | | | |
| Male | 47.2(45.4, 49.0) | 5,950,600 | 2,085 |
| Female | 52.8(51.0, 54.6) | 6,656,800 | 2,340 |
| *Age (years)* | | | |
| 15-24 | 22.9(21.2, 24.8) | 2,891,900 | 701 |
| 25-44 | 40.6(38.9, 42.3) | 5,116,200 | 1,876 |
| 45-64 | 27.6(26.0, 29.3) | 3,480,200 | 1,327 |
| 65+ | 8.9(8.0, 9.8) | 1,119,100 | 521 |
| *Residence* | | | |
| Urban | 56.6(55.1, 58.0) | 7,130,800 | 2,215 |
| Rural | 43.4(42.0, 44.9) | 5,476,600 | 2,210 |
| *Education*[2,3] | | | |
| Primary | 6.0(5.0, 7.3) | 586,000 | 266 |
| Secondary | 24.0(21.5, 26.7) | 2,328,300 | 935 |
| Secondary vocational | 30.6(28.4, 33.0) | 2,970,100 | 1,161 |
| Higher | 39.3(37.2, 41.4) | 3,808,700 | 1,354 |

Note: in 8 cases the respondents had no education at all.

[1] 95% confidence interval.

[2] Primary education includes such responses as “no school education”, “primary education”, and “incomplete basic education”; secondary education includes such responses as “basic secondary education”; secondary vocational education includesresponses such as “secondary technical/vocational”, and “higher incomplete” (student); and higher education includes such responses as “Higher” and “Postgraduate”.

[3] Education level is reported only for respondents aged 25 years or older.

# 4.TOBACCO USE

***Key findings:***

- *The prevalence of current smoking was 22.4% (42.4% among men and 4.5% among women), which represented 2.8 million people (2.5 million males and 301 thousand females)*
- *The prevalence of tobacco smoking was higher among urban dwellers (25.6%) than among the rural population (18.2%).*
- *The most common type of smoked tobacco product was manufactured cigarettes, with a prevalence of 22.2% (2.8 million people).*
- *Among daily smokers, 42.1% smoked 15 to 24 cigarettes per day.*
- *Approximately three of seven (43.9%) daily smokers started smoking daily at age 17-19 years.*
- *Just over half (50.9%) of daily smokers showed symptoms of high levels of nicotine dependence demonstrated by smoking within 30 minutes of waking.*
- *The prevalence of smokeless tobacco use was 1.3%, 2.8% among men and 0.0% among women.*

## 4.1. Tobacco Use Prevalence in the Republic of Kazakhstan

In accordance with the international definition, tobacco use was defined in this study as the use of smoked tobacco and smokeless tobacco products. Smoked tobacco products included cigarettes, mainly manufactured cigarettes, hand-rolled cigarettes, cigarillos, cigars, pipes, and hookah. Smokeless tobacco products included those for both chewing and sniffing tobacco (nasvay). An estimated 22.9% of adults (ages 15+) in Kazakhstan used tobacco, 43.4% of men and 4.5% of women (results not shown in tables).

### 4.1.1. Tobacco smoking

**Tables 4.1** and **4.2** present data on the prevalence of smoking in adults aged 15 years or older by smoking status and gender.The category of «current tobacco smokers» includes both «daily smokers» and «occasional smokers» (less than daily smoking). The category of «nonsmokers» includes «former daily smokers», «former occasional smokers», and «never smokers».

The prevalence of current tobacco smoking among all adults was 22.4% (2.8 million people). Most of the current smokers smoked daily (19.1% of the adult population, or 2.4 million people), while 3.3% of adults (414.7 thousand people) were occasional smokers. The majority of occasional smokers were former daily smokers (2.0% of the adult population, or 255.1 thousand people). Occasional smokers who had never smoked daily represented 1.3% of the population (159.6 thousand people).

Of RK's adult male population, 42.4% (2.5 million people) were current smokers, but only 4.5% of women (300.8 thousand) smoked currently, and thus the ratio of percentages was 9.4 to 1. A similar trend was seen for daily smokers: 36.9% of men in the population smoked daily (2.2 million people), while for women this proportion was 3.2% (210.9 thousand people), a ratio (by percentage) of 11.5 to 1. The proportion of men in the population who smoked occasionally (5.5%, or 324.9 thousand males) was four times as great as the proportion of occasional smokers among women (1.4%, or 89.9 thousand females). Considering smoking prevalence overall and by age groups (15-24, 25-44, 45-64, and 65+ years), tobacco smoking prevalence was 7 to 19 times higher among men than women (**Figure 4.1**). As shown in **Table 4.3**, the prevalence of tobacco smoking was just over one-third higher in the urban population than in rural areas (25.6% vs. 18.2%).

In all, 77.6% of adults in the RK were nonsmokers (9.8 million people). We found that 57.6% of males (3.4 million people) were nonsmokers, while 95.5% of women (6.4 million) fit in this category. The proportion of the population who were former daily smokers was 3.1% (394.1 thousand people), with 5.5% of men (327.2 thousand males), and 1.0% of women (66.9 thousand people). In comparison, 2.5% of the population was comprised of former occasional smokers (319.9 thousand people). Percentages were similar by gender: 2.9% of men (172.3 thousand) and 2.2 % of women (147.6 thousand). In all, 49.2% of males (2.9 million) and 92.3% of females (6.1 million) had never smoked.

**Table 4.1: Percentage of adults aged ≥15 years by smoking status and gender – GATS Kazakhstan, 2014.**

| Smoking Status | Overall | | Male | | Female | |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| **Current tobacco smoker** | 22.4 | (20.7, 24.2) | 42.4 | (39.6, 45.2) | 4.5 | (3.5, 5.8) |
| Daily smoker | 19.1 | (17.5, 20.8) | 36.9 | (34.2, 39.7) | 3.2 | (2.4, 4.2) |
| Occasional smoker | 3.3 | (2.7, 4.0) | 5.5 | (4.3, 6.8) | 1.4 | (0.8, 2.2) |
| Occasional smoker, formerly daily | 2.0 | (1.6, 2.6) | 3.5 | (2.6, 4.8) | 0.7 | (0.3, 1.3) |
| Occasional smoker, never daily | 1.3 | (1.0, 1.7) | 1.9 | (1.4, 2.7) | 0.7 | (0.4, 1.1) |
| **Nonsmoker** | 77.6 | (75.8, 79.3) | 57.6 | (54.8, 60.4) | 95.5 | (94.2, 96.5) |
| Former daily smoker | 3.1 | (2.7, 3.7) | 5.5 | (4.5, 6.7) | 1.0 | (0.6, 1.6) |
| Former occasional smoker | 2.5 | (2.0, 3.1) | 2.9 | (2.2, 3.8) | 2.2 | (1.6, 3.0) |
| Never smoker | 72.0 | (70.0, 73.8) | 49.2 | (46.4, 52.1) | 92.3 | (90.8, 93.5) |

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

**Table 4.2: Number of adults aged≥15 years by smoking status and gender – GATS Kazakhstan, 2014.**

| Smoking Status | Overall | Male | Female |
|---|---|---|---|
| | *Number in thousands* | | |
| **Current tobacco smoker** | 2,821.9 | 2,521.1 | 300.8 |
| Daily smoker | 2,407.2 | 2,196.3 | 210.9 |
| Occasional smoker | 414.7 | 324.9 | 89.9 |
| Occasional smoker, formerly daily | 255.1 | 210.0 | 45.1 |
| Occasional smoker, never daily | 159.6 | 114.9 | 44.7 |
| **Nonsmoker** | 9,785.5 | 3,429.5 | 6 356.0 |
| Former daily smoker | 394.1 | 327.2 | 66.9 |
| Former occasional smoker | 319.9 | 172.3 | 147.6 |
| Never smoker | 9,071.4 | 2,929.9 | 6 141.6 |

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

### 4.1.2. Smokeless tobacco

Table 4.1A and Table 4.2A present data on the prevalence (%) and number of adults using smokeless tobacco by residence and gender. The tables indicate a low prevalence of current use among adults, with an overall estimate of 1.3% (166.5 thousand people). Only 0.4% of adults were daily users, and 0.9% of RK adults used it occasionally. All current users were men (2.8% of the male adult population), with 0.9% of RK men being daily users. Overall, daily use was higher in the rural population (4.0%) than in urban areas (1.2%) (data not shown in a table or figure). The great majority of the adult population (96.6%) had never used smokeless, 0.2% were former daily users but now nonusers, and 1.9% had previously been occasional users but were now nonusers. Among men, 93.3% had never used smokeless, 3.5% were former occasional users but now nonusers, and 0.4% were former daily consumers of the product but not currently using it. Almost all (99.5%) women had never used smokeless tobacco.

**Table 4.1A: Percentage of adults aged ≥15 years by status of smokeless tobacco use and gender – GATS Kazakhstan, 2014.**

| Status | Overall | | Male | | Female | |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| **Current user** | 1.3 | (1.0, 1.8) | 2.8 | (2.0, 3.9) | 0.0 | |
| Daily user | 0.4 | (0.3, 0.7) | 0.9 | (0.6, 1.6) | 0.0 | |
| Occasional user | 0.9 | (0.6, 1.4) | 1.9 | (1.2, 2.9) | 0.0 | |
| Occasional user, formerly daily | 0.6 | (0.3, 1.0) | 1.2 | (0.7, 2.0) | 0.0 | |
| Occasional user, never daily | 0.3 | (0.2, 0.6) | 0.6 | (0.3, 1.2) | 0.0 | |
| **Nonuser** | 98.7 | (98.2, 99.0) | 97.2 | (96.1, 98.0) | 100.0 | |
| Former daily user | 0.2 | (0.1, 0.4) | 0.4 | (0.2, 0.9) | 0.0 | |
| Former occasional user | 1.9 | (1.3, 2.8) | 3.5 | (2.4, 5.0) | 0.5 | (0.2, 1.6) |
| Never user | 96.6 | (95.6, 97.3) | 93.3 | (91.5, 94.7) | 99.5 | (98.4, 99.8) |

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

**Table 4.2A: Number of adults aged ≥15 years by status of smokeless tobacco use and gender – GATS Kazakhstan, 2014.**

| Status | Overall | Male | Female |
|---|---|---|---|
| | *Number in thousands* | | |
| **Current user** | 166.5 | 166.5 | 0.0 |
| Daily user | 56.2 | 56.2 | 0.0 |
| Occasional user | 110.2 | 110.2 | 0.0 |
| Occasional user, formerly daily | 71.8 | 71.8 | 0.0 |
| Occasional user, never daily | 38.4 | 38.4 | 0.0 |
| **Nonuser** | 12 402.8 | 5,766.9 | 6 635.9 |
| Former daily user | 24.6 | 24.6 | 0.0 |
| Former occasional user | 241.6 | 206.2 | 35.4 |
| Never user | 12 136.5 | 5,536.0 | 6 600.5 |

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

## 4.2. Current Smokers of Various Smoked Tobacco Products

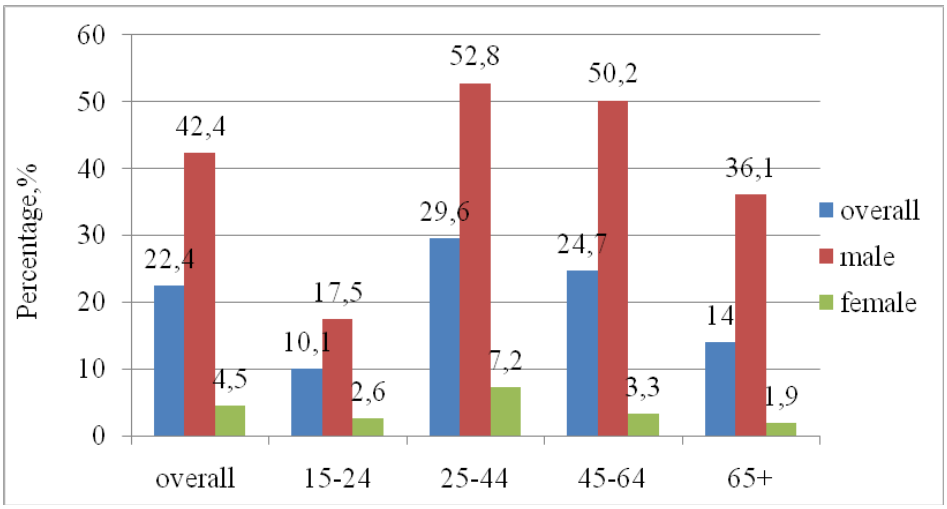
**Tables 4.3** and **4.4** present data on the prevalence (%) and number of current smokers of various smoked tobacco products, by gender and selected demographic characteristics in the RK.

The most common type of smoked tobacco products was manufactured cigarettes, which were smoked by 22.2% of adults (2.8 million people). In contrast, hand-rolled cigarettes were smoked by only 2.1% of adults (266 thousand people). A prevalence of 2.9% was found for both smoking hookah (363.9 thousand people), and smoking other tobacco products (pipes, cigars, cigarillos), with the latter percentage representing 371.1 thousand people.

Some differences were found by age in the prevalence of using certain types of tobacco products. For smoking any type of tobacco product the prevalence was highest in the 25-44 age group at 29.6% (1,513.0 thousand people), and it was lowest in the youngest age group (15-24), at 10.1% (293.3 thousand people).

Just over half (52.7%) of men aged 25-44 years smoked manufactured cigarettes (1.3 million people), with a slightly lower prevalence for men aged 45-64 (50.2%). Among men, the lowest prevalence for manufactured cigarettes was seen in the youngest age group (17.3%), with the oldest group, 65+, having the second-lowest rate, at 35.1%. Among women, those aged 25-44 years had the highest prevalence of smoking manufactured cigarettes, 6.8%, more than double the rate for any other age group.

**Figure 4.1: Prevalence of tobacco smoking among all adults aged≥15 years, by gender and age— GATS Kazakhstan, 2014.**




The prevalence of hand-rolled cigarette smoking was 4.2% for males (248.5 thousand people) and 0.3% for females 0.3% (17.6 thousand people), while hookah smoking prevalence was 5.4% (318.7 thousand people) for males and 0.7% for females (45.2 thousand people). For other tobacco product use, the prevalence was 5.6% (333.1 thousand people) for males and 0.6% for females (38.0 thousand people). In all cases, these proportions were well below the estimates for smoking manufactured cigarettes.

As expected, the survey found that men had a much higher prevalence than women for all types of smoking products. In terms of age, the overall figures indicated that the youngest group (15-24 years) had the lowest prevalence of hand-rolled cigarette smoking at just 0.5% (15.7 thousand people). For this activity, there was little difference in prevalence between the two middle age groups, 25-44 and 45-64, with estimates of 2.7% (139.4 thousand people) and 2.6% (91.3 thousand people), respectively. The estimate for the oldest age group (65+) was 1.8% (19.8 thousand people).

Regarding the smoking of hookah, which traditionally has not been a popular tobacco product in the RK, the survey reflects its emergence as a fashionable activity in some parts of the population. By age, the highest estimate for current smoking of this product was found for those 25-44, at 4.3% (219.9 thousand people), followed by those aged 15-24 years, at 2.4% (68.3 thousand people), and the 45-64 group,at 2.1%. In the oldest group (65+), the prevalence was only 0.1%, presumably reflecting hookah's recent emergence in the RK. In 2013, the Ministry of Health ordered that hookah smoking be prohibited in public places, cafes, and restaurants. There are no effective mechanisms in place, however, to see that this order is observed or even implemented at all, and thus hookah smoking continues in cafes and restaurants.

Overall, the survey found a statistically significant difference in the prevalence of smoking of any type between urban and rural areas (25.6% versus 18.2%), and significant differences (with "urban" higher) were also found by residence for "any cigarette" (25.3% vs. 18.1%) and for manufactured cigarettes (also 25.3% vs. 18.1%).

The study found few significant differences by education level for the six categories of tobacco products considered in **Table 4.3**. In absolute terms, the prevalence of consuming any smoked tobacco product was highest among those with a secondary technical education, at 30.7%, and this proportion was significantly higher than for those with a college education or above (23.8%) while also being higher, but not significantly so, than the prevalence for those with a secondary general education (23.4%) or with primary or less (26.7%). For the smoking of hand-rolled cigarettes, those with a secondary education had the highest prevalence, 3.0%, but there were no significant differences by level. For hookah smoking, those with college or more had the highest prevalence (3.9%), but again no significant differences were found. Finally, for other smoked tobacco, those at the secondary general level had the highest prevalence, 5.9%, with those at the secondary technical level having the lowest prevalence, 2.4%, an estimate that just failed to differ significantly from the estimate for the secondary general group. .

**Figure 4.2**, which combines gender and education for tobacco smoking overall, reveals the higher prevalence of use among males compared to females for this activity at every level of education.

**Figure 4.2: Prevalence of tobacco smoking among all adults aged≥15 years, by gender and education— GATS Kazakhstan, 2014.**

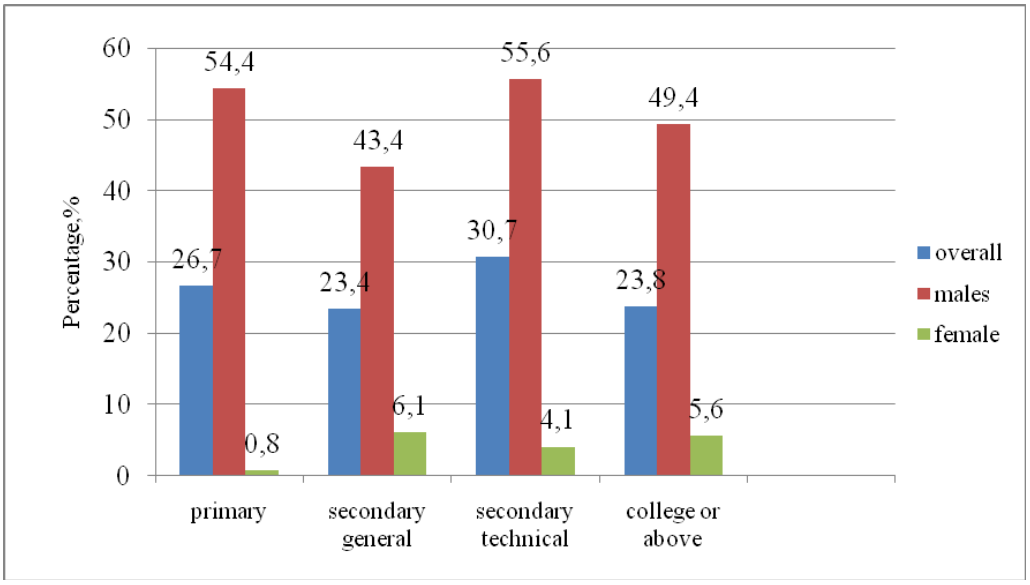


**Table 4.3: Percentage of adults aged ≥15 years who were current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Any smoked tobacco product | | Any cigarette[1] | | Type of Cigarette | | | | Hookah | | Other smoked tobacco[2] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Manufactured | | Hand-rolled | | | | | |
| | *Percentage (95% CI)* | | | | | | | | | | | |
| **Overall** | 22.4 | (20.7, 24.2) | 22.2 | (20.5, 24.0) | 22.2 | (20.4, 24.0) | 2.1 | (1.5, 2.9) | 2.9 | (2.2, 3.7) | 2.9 | (2.2, 3.9) |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 10.1 | (8.1, 12.7) | 9.9 | (7.8, 12.4) | 9.9 | (7.8, 12.4) | 0.5 | (0.2, 1.4) | 2.4 | (1.4, 4.0) | 0.8 | (0.4, 1.7) |
| 25-44 | 29.6 | (26.9, 32.3) | 29.4 | (26.7, 32.1) | 29.4 | (26.7, 32.1) | 2.7 | (1.8, 4.1) | 4.3 | (3.2, 5.8) | 3.9 | (2.8, 5.3) |
| 45-64 | 24.7 | (21.7, 27.9) | 24.5 | (21.5, 27.7) | 24.5 | (21.5, 27.7) | 2.6 | (1.6, 4.2) | 2.1 | (1.2, 3.8) | 3.7 | (2.4, 5.6) |
| 65+ | 14.0 | (10.4, 18.6) | 13.8 | (10.2, 18.4) | 13.7 | (10.1, 18.2) | 1.8 | (0.7, 4.7) | 0.1 | (0.0, 0.8) | 1.9 | (0.7, 4.8) |
| *Residence* | | | | | | | | | | | | |
| Urban | 25.6 | (23.1, 28.3) | 25.3 | (22.8, 27.9) | 25.3 | (22.8, 27.9) | 2.0 | (1.3, 3.0) | 3.8 | (2.9, 5.0) | 2.7 | (2.0, 3.8) |
| Rural | 18.2 | (16.2, 20.5) | 18.1 | (16.1, 20.4) | 18.1 | (16.1, 20.3) | 2.2 | (1.3, 3.8) | 1.7 | (0.8, 3.2) | 3.2 | (2.1, 5.0) |
| *Education level[3]* | | | | | | | | | | | | |
| Primary or less | 26.7 | (20.2, 34.4) | 26.7 | (20.2, 34.4) | 26.4 | (19.9, 34.1) | 2.8 | (1.1, 7.2) | 1.4 | (0.5, 4.1) | 3.3 | (1.4, 7.5) |
| Secondary general | 23.4 | (19.6, 27.7) | 23.1 | (19.3, 27.3) | 23.1 | (19.3, 27.3) | 3.0 | (1.6, 5.8) | 3.1 | (1.5, 6.1) | 5.9 | (3.8, 8.9) |
| Secondary technical | 30.7 | (27.1, 34.6) | 30.7 | (27.0, 34.6) | 30.7 | (27.0, 34.6) | 2.5 | (1.5, 4.0) | 2.3 | (1.4, 3.8) | 2.4 | (1.5, 3.8) |
| College or above | 23.8 | (21.2, 26.7) | 23.6 | (21.0, 26.3) | 23.6 | (21.0, 26.3) | 2.4 | (1.5, 3.7) | 3.9 | (2.8, 5.4) | 3.2 | (2.2, 4.6) |

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

[1] Includes manufactured and hand-rolled cigarettes.

[2] Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

[3] Education level is reported only for personsaged 25+ years.

**Table 4.3 (cont.): Percentage of adults aged ≥15 years who were current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Any smoked tobacco product | | Any cigarette[1] | | Type of Cigarette: Manufactured | | Type of Cigarette: Hand-rolled | | Hookah | | Other smoked tobacco[2] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | | | | | | | |
| **Male** | 42.4 | (39.6, 45.2) | 42.2 | (39.4, 45.0) | 42.2 | (39.4, 45.0) | 4.2 | (3.0, 5.9) | 5.4 | (4.0, 7.1) | 5.6 | (4.2, 7.5) |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 17.5 | (13.7, 22.2) | 17.3 | (13.5, 21.8) | 17.3 | (13.5, 21.8) | 1.1 | (0.4, 2.7) | 4.3 | (2.5, 7.5) | 1.6 | (0.8, 3.3) |
| 25-44 | 52.8 | (48.8, 56.8) | 52.7 | (48.7, 56.7) | 52.7 | (48.7, 56.7) | 5.1 | (3.3, 7.8) | 7.4 | (5.3, 10.2) | 6.8 | (4.7, 9.6) |
| 45-64 | 50.2 | (45.1, 55.2) | 50.2 | (45.1, 55.2) | 50.2 | (45.1, 55.2) | 5.7 | (3.5, 9.1) | 4.4 | (2.3, 8.1) | 7.8 | (5.0, 11.9) |
| 65+ | 36.1 | (28.0, 45.2) | 35.5 | (27.4, 44.6) | 35.1 | (27.0, 44.1) | 3.8 | (1.7, 8.7) | 0.3 | (0.0, 2.1) | 4.1 | (1.8, 9.2) |
| *Residence* | | | | | | | | | | | | |
| Urban | 48.8 | (44.7, 52.9) | 48.5 | (44.5, 52.6) | 48.5 | (44.5, 52.6) | 4.3 | (2.8, 6.4) | 7.3 | (5.4, 9.6) | 5.2 | (3.6, 7.5) |
| Rural | 34.7 | (31.1, 38.4) | 34.7 | (31.1, 38.4) | 34.6 | (31.1, 38.3) | 4.1 | (2.3, 7.1) | 3.1 | (1.5, 6.3) | 6.0 | (3.8, 9.5) |
| *Education level[3]* | | | | | | | | | | | | |
| Primary or less | 54.4 | (43.6, 64.8) | 54.4 | (43.6, 64.8) | 53.8 | (43.0, 64.2) | 4.9 | (1.7, 13.5) | 1.9 | (0.5, 7.8) | 5.9 | (2.3, 14.4) |
| Secondary general | 43.4 | (37.2, 49.9) | 43.2 | (36.9, 49.7) | 43.2 | (36.9, 49.7) | 6.2 | (3.2, 11.7) | 6.1 | (2.9, 12.3) | 11.8 | (7.6, 17.8) |
| Secondary technical | 55.6 | (50.4, 60.6) | 55.4 | (50.2, 60.5) | 55.4 | (50.2, 60.5) | 4.7 | (2.8, 7.6) | 4.5 | (2.7, 7.4) | 4.6 | (2.8, 7.4) |
| College or above | 49.4 | (44.6, 54.3) | 49.4 | (44.6, 54.3) | 49.4 | (44.6, 54.3) | 5.1 | (3.1, 8.1) | 7.3 | (5.1, 10.5) | 6.0 | (3.8, 9.4) |
| **Female** | 4.5 | (3.5, 5.8) | 4.2 | (3.3, 5.5) | 4.2 | (3.3, 5.5) | 0.3 | (0.1, 0.7) | 0.7 | (0.4, 1.1) | 0.6 | (0.3, 1.1) |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 2.6 | (1.4, 4.8) | 2.4 | (1.3, 4.6) | 2.4 | (1.3, 4.6) | 0.0 | | 0.4 | (0.1, 1.5) | 0.0 | |
| 25-44 | 7.2 | (5.5, 9.3) | 6.8 | (5.2, 8.9) | 6.8 | (5.2, 8.9) | 0.4 | (0.1, 1.4) | 1.3 | (0.8, 2.2) | 1.1 | (0.5, 2.2) |
| 45-64 | 3.3 | (1.8, 6.0) | 2.9 | (1.5, 5.6) | 2.9 | (1.5, 5.6) | 0.1 | (0.0, 0.6) | 0.3 | (0.1, 1.3) | 0.3 | (0.1, 1.3) |
| 65+ | 1.9 | (0.7, 5.0) | 1.9 | (0.7, 5.0) | 1.9 | (0.7, 5.0) | 0.6 | (0.1, 4.4) | 0.0 | | 0.6 | (0.1, 4.4) |
| *Residence* | | | | | | | | | | | | |
| Urban | 6.2 | (4.7, 8.2) | 5.9 | (4.4, 7.8) | 5.9 | (4.4, 7.8) | 0.1 | (0.0, 1.0) | 1.0 | (0.6, 1.7) | 0.7 | (0.3, 1.4) |
| Rural | 2.2 | (1.3, 3.5) | 1.9 | (1.2, 3.1) | 1.9 | (1.2, 3.1) | 0.5 | (0.1, 1.4) | 0.3 | (0.1, 0.8) | 0.5 | (0.1, 1.4) |
| *Education level[3]* | | | | | | | | | | | | |
| Primary or less | 0.8 | (0.1, 5.8) | 0.8 | (0.1, 5.8) | 0.8 | (0.1, 5.8) | 0.8 | (0.1, 5.8) | 0.8 | (0.1, 5.8) | 0.8 | (0.1, 5.8) |
| Secondary general | 6.1 | (3.8, 9.7) | 5.7 | (3.4, 9.2) | 5.7 | (3.4, 9.2) | 0.3 | (0.0, 2.0) | 0.4 | (0.1, 2.0) | 0.7 | (0.2, 3.1) |
| Secondary technical | 4.1 | (2.6, 6.5) | 4.1 | (2.6, 6.5) | 4.1 | (2.6, 6.5) | 0.1 | (0.0, 0.7) | 0.0 | | 0.1 | (0.0, 0.7) |
| College or above | 5.6 | (4.0, 7.9) | 5.2 | (3.7, 7.3) | 5.2 | (3.7, 7.3) | 0.5 | (0.1, 1.4) | 1.4 | (0.7, 2.7) | 1.1 | (0.6, 2.2) |

[1] Includes manufactured and hand-rolled cigarettes. [2] Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products. [3] Education level is reported only for persons aged 25+ years.

**Table 4.4: Number of adults aged ≥15 years who were current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Any smoked tobacco product | Any cigarette[1] | Type of Cigarette | | Hookah | Other smoked tobacco[2] |
|---|---|---|---|---|---|---|
| | | | Manufactured | Hand-rolled | | |
| | | | *Number in thousands* | | | |
| **Overall** | 2,821.9 | 2,794.5 | 2,792.8 | 266.2 | 363.9 | 371.1 |
| *Age (years)* | | | | | | |
| 15-24 | 293.3 | 285.9 | 285.9 | 15.7 | 68.3 | 23.5 |
| 25-44 | 1,513.0 | 1,502.2 | 1,502.2 | 139.4 | 219.9 | 198.2 |
| 45-64 | 858.7 | 851.8 | 851.8 | 91.3 | 74.6 | 128.5 |
| 65+ | 156.9 | 154.5 | 152.8 | 19.8 | 1.2 | 20.8 |
| *Residence* | | | | | | |
| Urban | 1,823.2 | 1,801.9 | 1,801.9 | 143.2 | 273.6 | 194.8 |
| Rural | 998.7 | 992.6 | 990.9 | 123.0 | 90.4 | 176.3 |
| *Education level*[3] | | | | | | |
| Primary or less | 156.3 | 156.3 | 154.6 | 16.5 | 8.0 | 19.3 |
| Secondary general | 545.2 | 537.1 | 537.1 | 70.4 | 71.1 | 136.7 |
| Secondary technical | 912.9 | 910.6 | 910.6 | 73.6 | 68.6 | 71.5 |
| College or above | 907.3 | 897.6 | 897.6 | 90.1 | 148.0 | 120.0 |

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

[1] Includes manufactured and hand-rolled cigarettes.

[2] Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.

[3] Education level is reported only for persons aged 25+ years.

**Table 4.4 (cont.): Number of adults aged ≥15 years who were current smokers of various smoked tobacco products, by gender and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Any smoked tobacco product | Type of Cigarette | | | Hookah | Other smoked tobacco[2] |
|---|---|---|---|---|---|---|
| | | Any cigarette[1] | Manufactured | Hand-rolled | | |
| | | *Number in thousands* | | | | |
| **Male** | 2,521.1 | 2,512.3 | 2,510.5 | 248.5 | 318.7 | 333.1 |
| *Age (years)* | | | | | | |
| 15-24 | 255.3 | 251.1 | 251.1 | 15.7 | 63.0 | 23.5 |
| 25-44 | 1,326.8 | 1,324.6 | 1,324.6 | 127.8 | 185.3 | 170.1 |
| 45-64 | 796.0 | 796.0 | 796.0 | 89.8 | 69.2 | 123.1 |
| 65+ | 143.0 | 140.5 | 138.8 | 15.2 | 1.2 | 16.3 |
| *Residence* | | | | | | |
| Urban | 1,582.0 | 1,573.2 | 1,573.2 | 138.0 | 235.4 | 169.3 |
| Rural | 939.1 | 939.1 | 937.4 | 110.5 | 83.3 | 163.8 |
| *Education level*[3] | | | | | | |
| Primary or less | 153.7 | 153.7 | 152.0 | 14.0 | 5.5 | 16.7 |
| Secondary general | 469.0 | 466.6 | 466.6 | 66.9 | 65.5 | 127.5 |
| Secondary technical | 854.0 | 851.7 | 851.7 | 72.1 | 68.6 | 70.1 |
| College or above | 782.1 | 782.1 | 782.1 | 79.9 | 116.2 | 95.2 |
| **Female** | 300.8 | 282.2 | 282.2 | 17.6 | 45.2 | 38.0 |
| *Age (years)* | | | | | | |
| 15-24 | 37.9 | 34.8 | 34.8 | 0.0 | 5.3 | 0.0 |
| 25-44 | 186.2 | 177.6 | 177.6 | 11.6 | 34.6 | 28.0 |
| 45-64 | 62.7 | 55.8 | 55.8 | 1.5 | 5.4 | 5.4 |
| 65+ | 14.0 | 14.0 | 14.0 | 4.5 | 0.0 | 4.5 |
| *Residence* | | | | | | |
| Urban | 241.2 | 228.7 | 228.7 | 5.1 | 38.2 | 25.5 |
| Rural | 59.6 | 53.5 | 53.5 | 12.5 | 7.1 | 12.5 |
| *Education level*[3] | | | | | | |
| Primary or less | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| Secondary general | 76.2 | 70.5 | 70.5 | 3.5 | 5.6 | 9.2 |
| Secondary technical | 58.9 | 58.9 | 58.9 | 1.5 | 0.0 | 1.5 |
| College or above | 125.2 | 115.5 | 115.5 | 10.1 | 31.8 | 24.8 |

[1] Includes manufactured and hand-rolled cigarettes.
[2] Includes pipes, cigars/cheroots/cigarillos, and any other reported smoking tobacco products.
[3] Education level is reported only for persons aged 25+ years.

## 4.3. Daily Smokers, Occasional Smokers, and Nonsmokers Among Adults Aged 15 or Older

**Table 4.5** shows the percentage distribution of all adults aged ≥15 years in three categories─ daily smokers, occasional smokers, and nonsmokers─by age, area of residence, and level of education.

In the adult population, the proportion of daily smokers (19.1%) was higher than the proportion of occasional smokers (3.3%). By age, the highest prevalence of daily smokers was in the 25-44 age group (25.3%), with the 45-64 group at 21.4%. Daily smokers were significantly more likely to live in urban areas (21.6%) than in rural areas (15.8%). Among men, 36.9% were daily smokers, contrasting sharply with the rate for women of 3.2%. Of men living in urban areas, 42.7% were daily smokers, while for rural men this estimate was 30.0%.

The prevalence of occasional smoking among the adult population was 3.3%. There were no significant differences in the prevalence of this activity by level of education, or residence, but the survey did find a significant difference between the oldest group (65+, 0.9%) and those aged 25-

44 (4.2%). The estimate for occasional smoking was much higher for men (5.5%) than for women (1.4%) (**Table 4.5 and Figure 4.3**).

**Figure 4.3: Smoking frequency among adults aged ≥15 years, by gender and residence – GATS Kazakhstan, 2014.**

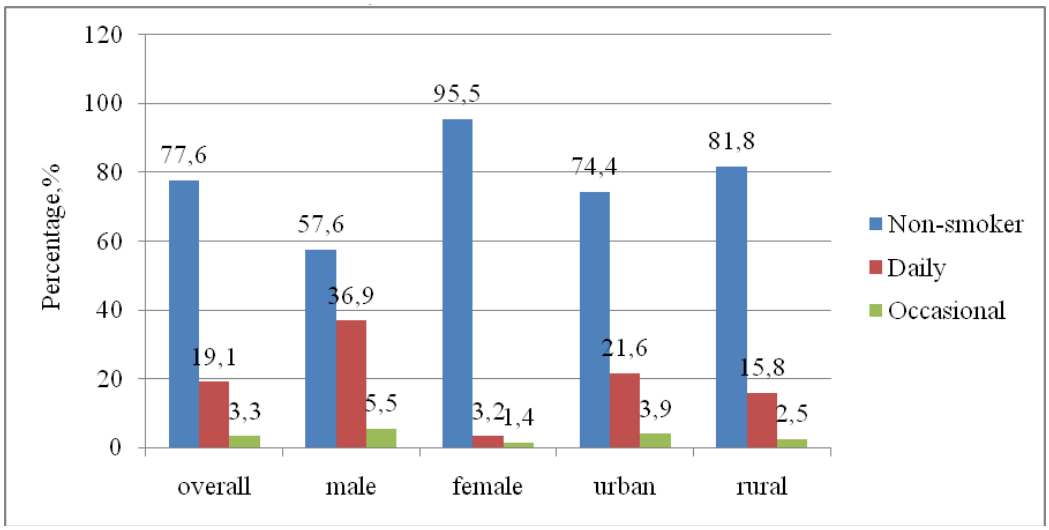



**Table 4.5: Percentage distribution of adults aged ≥15 years, by smoking frequency, gender, and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Smoking Frequency | | | | | | Total |
|---|---|---|---|---|---|---|---|
| | Daily | | Occasional[1] | | Nonsmoker | | |
| | *Percentage (95% CI)* | | | | | | |
| **Overall** | 19.1 | (17.5, 20.8) | 3.3 | (2.7, 4.0) | 77.6 | (75.8, 79.3) | 100 |
| *Age (years)* | | | | | | | |
| 15-24 | 7.5 | (5.9, 9.7) | 2.6 | (1.6, 4.1) | 89.9 | (87.3, 91.9) | 100 |
| 25-44 | 25.3 | (23.0, 27.9) | 4.2 | (3.2, 5.6) | 70.4 | (67.7, 73.1) | 100 |
| 45-64 | 21.4 | (18.6, 24.6) | 3.2 | (2.2, 4.7) | 75.3 | (72.1, 78.3) | 100 |
| 65+ | 13.1 | (9.5, 17.7) | 0.9 | (0.4, 2.4) | 86.0 | (81.4, 89.6) | 100 |
| *Residence* | | | | | | | |
| Urban | 21.6 | (19.3, 24.2) | 3.9 | (3.1, 4.9) | 74.4 | (71.7, 76.9) | 100 |
| Rural | 15.8 | (14.0, 17.7) | 2.5 | (1.7, 3.5) | 81.8 | (79.5, 83.8) | 100 |
| *Education level*[2] | | | | | | | |
| Primary or less | 23.7 | (17.7, 31.0) | 3.0 | (1.3, 6.5) | 73.3 | (65.6, 79.8) | 100 |
| Secondary general | 20.8 | (17.0, 25.0) | 2.7 | (1.6, 4.4) | 76.6 | (72.3, 80.4) | 100 |
| Secondary technical | 28.0 | (24.6, 31.7) | 2.7 | (1.8, 4.1) | 69.3 | (65.4, 72.9) | 100 |
| College or above | 19.2 | (17.0, 21.6) | 4.6 | (3.4, 6.2) | 76.2 | (73.3, 78.8) | 100 |

[1] Occasional refers to less than daily use.

[2] Education level is reported only for persons aged 25+ years.

**Table 4.5 (cont.): Percentage distribution of adults aged ≥15 years, by smoking frequency, gender, and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Smoking Frequency | | | | | | Total |
|---|---|---|---|---|---|---|---|
| | Daily | | Occasional[1] | | Nonsmoker | | |
| | *Percentage (95% CI)* | | | | | | |
| **Male** | 36.9 | (34.2, 39.7) | 5.5 | (4.3, 6.8) | 57.6 | (54.8, 60.4) | 100 |
| *Age (years)* | | | | | | | |
| 15-24 | 13.1 | (10.1, 16.9) | 4.4 | (2.7, 7.2) | 82.5 | (77.8, 86.3) | 100 |
| 25-44 | 46.7 | (42.7, 50.8) | 6.1 | (4.3, 8.4) | 47.2 | (43.2, 51.2) | 100 |
| 45-64 | 43.8 | (38.9, 48.8) | 6.4 | (4.3, 9.5) | 49.8 | (44.8, 54.9) | 100 |
| 65+ | 34.6 | (26.6, 43.6) | 1.5 | (0.6, 3.8) | 63.9 | (54.8, 72.0) | 100 |
| *Residence* | | | | | | | |
| Urban | 42.7 | (38.7, 46.7) | 6.1 | (4.5, 8.3) | 51.2 | (47.1, 55.3) | 100 |
| Rural | 30.0 | (26.8, 33.4) | 4.6 | (3.3, 6.6) | 65.3 | (61.6, 68.9) | 100 |
| *Education level*[2] | | | | | | | |
| Primary or less | 48.2 | (38.4, 58.2) | 6.1 | (2.7, 13.2) | 45.6 | (35.2, 56.4) | 100 |
| Secondary general | 38.0 | (31.4, 45.0) | 5.5 | (3.3, 8.8) | 56.6 | (50.1, 62.8) | 100 |
| Secondary technical | 51.2 | (46.3, 56.1) | 4.3 | (2.7, 6.8) | 44.4 | (39.4, 49.6) | 100 |
| College or above | 42.3 | (37.9, 46.8) | 7.2 | (4.9, 10.3) | 50.6 | (45.7, 55.4) | 100 |
| **Female** | 3.2 | (2.4, 4.2) | 1.4 | (0.8, 2.2) | 95.5 | (94.2, 96.5) | 100 |
| *Age (years)* | | | | | | | |
| 15-24 | 1.9 | (0.9, 3.9) | 0.7 | (0.2, 2.3) | 97.4 | (95.2, 98.6) | 100 |
| 25-44 | 4.7 | (3.4, 6.4) | 2.5 | (1.4, 4.3) | 92.8 | (90.7, 94.5) | 100 |
| 45-64 | 2.7 | (1.4, 5.4) | 0.6 | (0.1, 2.2) | 96.7 | (94.0, 98.2) | 100 |
| 65+ | 1.3 | (0.4, 4.3) | 0.6 | (0.1, 4.0) | 98.1 | (95.0, 99.3) | 100 |
| *Residence* | | | | | | | |
| Urban | 4.1 | (2.9, 5.8) | 2.1 | (1.2, 3.5) | 93.8 | (91.8, 95.3) | 100 |
| Rural | 1.8 | (1.1, 3.1) | 0.3 | (0.1, 0.9) | 97.8 | (96.5, 98.7) | 100 |
| *Education level*[2] | | | | | | | |
| Primary or less | 0.8 | (0.1, 5.8) | 0.0 | | 99.2 | (94.2, 99.9) | 100 |
| Secondary general | 5.9 | (3.6, 9.5) | 0.2 | (0.1, 1.0) | 93.9 | (90.3, 96.2) | 100 |
| Secondary technical | 3.1 | (1.8, 5.4) | 1.0 | (0.4, 2.3) | 95.9 | (93.5, 97.4) | 100 |
| College or above | 2.8 | (1.7, 4.7) | 2.8 | (1.6, 4.8) | 94.4 | (92.1, 96.0) | 100 |

[1] Occasional refers to less than daily use.

[2] Education level is reported only for persons aged 25+ years.

## 4.4. Number of Cigarettes Smoked per Day

**Table 4.6** provides information on adult daily cigarette smokers by cigarettes smoked per day according to age, education, and residence. Approximately three of seven (42.1%) daily cigarette smokers smoked 15 to 24 cigarettes per day, a moderate to a fairly heavy level of smoking. Just about 1 in 13, or 7.8%, of daily smokers smoked 25 or more cigarettes per day, or at least 1.25 packs or more, a very dangerous level. Daily smokers as a group averaged 14.9 cigarettes per day, with 5.2% smoking less than 5 cigarettes; 18.6%, 5-9; and 26.3%, 10-14. Using 15 cigarettes as the cutoff for smoking a lot, the table shows that essentially half (49.9%) of daily smokers could be classified in this category.

Among daily cigarette smokers, men smoked significantly more than women: 15.2 versus 11.8 cigarettes per day. For men, the most common range was 15-24 cigarettes (44.2%), with 26.1% of men smoking 10-14 cigarettes per day and 17.2% smoking 5-9. Among female daily smokers, the most common ranges were 5-9 (33.2%) and 10-14 (28.2%) cigarettes per day, but consistent with the small numbers of female smokers, these percentages did not differ significantly from the third-highest range (15-24, 20.0%). Men were less likely than women to smoke <5 cigarettes per day or to smoke 5 to 9 cigarettes per day, but these differences were not significant. At 10-14 cigarettes per day, the proportions were quite similar by gender: 26.1% of male daily smokers and 28.2% of their female counterparts. For smoking 15-24 cigarettes daily, the proportion of men was more than twice the proportion of women (men, 44.2%; women, 20.0%).

In overall analyses, the survey found that daily smokers aged 15-24 years smoked significantly fewer cigarettes per

day (10.8) than did other age groups. In addition, daily smokers living in rural areas smoked a higher number of cigarettes per day (17.2) than did those living in urban areas (14.9). The analysis also found that in the categories of 15-24 and ≥25 cigarettes daily the percentage of rural residents was higher than the rate of urban residents (47.6% vs. 39.0% and 13.4% vs. 4.7%, respectively).

## Table 4.6: Average number and percentage distribution of cigarettes smoked per day among daily cigarette smokers aged ≥15 years, by gender and selected demographic characteristics – GATS Kazakhstan, 2014.

| Demographic characteristic | Average number of cigarettes smoked per day[1] | Estimates for Specific Ranges [1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | <5 | | 5-9 | | 10-14 | | 15-24 | | ≥25 | | Total |
| | *Mean (95% CI)* | *Percentage (95% CI)* | | | | | | | | | | |
| **Overall** | 14.9 (14.1, 15.7) | 5.2 | (3.5, 7.7) | 18.6 | (15.5, 22.1) | 26.3 | (23.1, 29.8) | 42.1 | (37.4, 47.0) | 7.8 | (5.7, 10.7) | 100 |
| *Gender* | | | | | | | | | | | | |
| Male | 15.2 (14.4, 16.0) | 4.7 | (3.1, 7.0) | 17.2 | (14.1, 20.8) | 26.1 | (22.8, 29.7) | 44.2 | (39.3, 49.1) | 7.8 | (5.7, 10.7) | 100 |
| Female | 11.8 (9.3, 14.3) | 10.9 | (4.9, 22.7) | 33.2 | (20.0, 49.7) | 28.2 | (17.8, 41.8) | 20.0 | (11.2, 33.1) | 7.6 | (2.8, 19.0) | 100 |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 10.8 (9.1, 12.4) | 12.2 | (4.7, 28.2) | 28.2 | (16.1, 44.6) | 29.7 | (16.5, 47.3) | 28.1 | (17.7, 41.4) | 1.9 | (0.4, 7.8) | 100 |
| 25-44 | 14.9 (14.0, 15.9) | 4.9 | (3.1, 7.8) | 17.4 | (13.9, 21.6) | 28.4 | (24.1, 33.2) | 41.4 | (35.7, 47.4) | 7.8 | (5.3, 11.4) | 100 |
| 45-64 | 16.0 (14.6, 17.3) | 3.7 | (1.8, 7.6) | 18.2 | (13.0, 25.0) | 22.3 | (16.8, 28.8) | 46.6 | (38.6, 54.8) | 9.2 | (5.8, 14.2) | 100 |
| 65+ | 16.0 (12.7, 19.3) | 4.6 | (1.3, 15.1) | 16.4 | (8.3, 29.7) | 22.6 | (12.0, 38.4) | 46.8 | (30.9, 63.4) | 9.6 | (3.1, 26.2) | 100 |
| *Residence* | | | | | | | | | | | | |
| Urban | 13.7 (12.9, 14.5) | 5.4 | (3.2, 9.0) | 21.0 | (17.0, 25.5) | 29.9 | (25.6, 34.6) | 39.0 | (33.5, 44.9) | 4.7 | (2.8, 7.6) | 100 |
| Rural | 17.2 (15.6, 18.8) | 4.8 | (2.6, 8.6) | 14.3 | (10.0, 20.2) | 19.8 | (15.5, 25.0) | 47.6 | (39.4, 56.0) | 13.4 | (8.9, 19.7) | 100 |
| *Education level*[2] | | | | | | | | | | | | |
| Primary or less | 16.5 (13.4, 19.7) | 7.4 | (2.3, 21.4) | 12.4 | (5.8, 24.3) | 20.0 | (8.1, 41.7) | 53.6 | (34.4, 71.7) | 6.7 | (2.0, 20.3) | 100 |
| Secondarygeneral | 16.2 (14.5, 18.0) | 2.7 | (1.0, 7.0) | 17.3 | (12.0, 24.4) | 23.7 | (17.1, 32.0) | 46.7 | (36.9, 56.7) | 9.5 | (5.4, 16.2) | 100 |
| Secondary technical | 16.0 (14.7, 17.2) | 5.4 | (3.0, 9.3) | 13.9 | (9.7, 19.6) | 24.0 | (18.9, 29.9) | 47.0 | (38.9, 55.2) | 9.7 | (6.1, 15.1) | 100 |
| College or above | 13.9 (12.7, 15.1) | 4.1 | (2.2, 7.5) | 23.1 | (17.6, 29.8) | 30.5 | (24.6, 37.1) | 35.8 | (29.3, 42.8) | 6.5 | (3.6, 11.4) | 100 |

[1] Among daily cigarette smokers. Cigarettes include both manufactured and hand-rolled.

[2] Education level is reported only for persons aged 25+ years.

### 4.5. Age of Smoking Initiation

**Table 4.7** shows the distribution of persons aged 20-34 years who had ever been daily smokers by the age at which they initiated daily smoking, overall as well as by gender, residence, and education. An estimated 7.4% of the group of interest began their daily smoking at age 15 or younger, and the distribution here was quite similar by gender and residence (men, 7.4%; women, 7.8%; urban, 7.3%, rural, 7.9%). Overall, 12.6% of those in the population of interest began daily smoking at the age of 15-16 years, with estimates here of 13.4% for men and 7.3% for women. By area, the estimates for starting at this period in life were 10.5% for urban residents and 19.1% for those in rural areas.

The most common age range for initiating daily smoking, both overall and by gender, was 17-19 years, with estimates of 43.9% for all of the population of interest (43.1% of males and 48.9% of females). By residence, the estimates for beginning daily smoking at age 17-19 were 49.2% for urban residents and 27.3% for those in rural areas. Just over one-third (36.1%) of adults aged 20-34 who had ever been daily smokers did so at age 20 or later, with almost identical estimates by gender (men, 36.1%, women, 36.0%), but rural residents were more likely than their urban counterparts to start at 20 or later (45.6% vs. 33.0%), although this difference was not significant.

In terms of education, the study found that just over half (52.2%) of the people in the group of interest who started daily smoking at age 17-19 had a secondary general education but no college.

**Table 4.7: Percentage distribution of ever daily smokers aged 20-34 years by age at initiation of daily smoking, gender, residence, and education level– GATS Kazakhstan, 2014.**

| Demographic characteristic | Age (in Years) at Initiation of Daily Smoking [1] | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | <15 | | 15-16 | | 17-19 | | 20+ | | |
| | *Percentage (95% CI)* | | | | | | | | |
| **Overall** | 7.4 | (4.6, 11.7) | | (9.7, 16.2) | 43.9 | (37.8, 50.1) | 36.1 | (29.5, 43.3) | 100 |
| *Gender* | | | | | | | | | |
| Male | 7.4 | (4.7, 11.4) | 12.6 | (10.1, 17.6) | 43.1 | (36.6, 49.7) | 36.1 | (29.3, 43.7) | 100 |
| Female | 7.8 | (1.9, 26.6) | 7.3 | (2.9, 17.2) | 48.9 | (30.8, 67.3) | 36.0 | (21.7, 53.3) | 100 |
| *Residence* | | | | | | | | | |
| Urban | 7.3 | (4.1, 12.6) | 10.5 | (7.5, 14.5) | 49.2 | (41.9, 56.6) | 33.0 | (25.6, 41.4) | 100 |
| Rural | 7.9 | (3.4, 17.3) | 19.1 | (12.5, 28.1) | 27.3 | (17.9, 39.5) | 45.6 | (31.8, 60.1) | 100 |
| *Education level*[2] | | | | | | | | | |
| Primary or less | * | | * | | * | | * | | 100 |
| Secondary general | 5.2 | (1.2, 19.8) | 6.9 | (3.0, 15.2) | 52.2 | (37.1, 67.0) | 35.7 | (23.4, 50.1) | 100 |
| Secondary technical | 9.0 | (4.3, 18.0) | 17.0 | (10.8, 25.5) | 36.3 | (25.7, 48.5) | 37.7 | (26.1, 50.9) | 100 |
| College or above | 5.8 | (2.7, 12.2) | 5.4 | (2.4, 11.5) | 41.3 | (31.9, 51.4) | 47.5 | (37.0, 58.2) | 100 |

[1] Among persons aged 20-34 years who were ever daily smokers.
[2] Education level is reported only for persons aged 25+ years.
* Indicates the estimate was based on less than 25 unweighted cases and thus was suppressed.

## 4.6. Former Daily Smokers

**Table 4.8** shows the percentages of former daily smokers who were currently nonsmokers among all adults as well as among persons who were ever daily smokers (the latter percentage is the so-called rate of quitting among daily smokers). Breakdowns are presented by gender, age, residence, and education.

The proportion of former daily smokers among all adults was 3.1% (5.5% among men and 1.0% among women). Overall estimates were 3.3% for rural areas and 2.9% for rural areas. The percentage of former daily smokers among ever daily smokers was low ─12.9% overall, with rates of 12.0% for men and 20.7% for women. Rates on this measure were similar by geography: 12.1% for urban and 14.2% for rural. By age, the study found that the 65+ group had a significantly higher percentage of former daily smokers (when calculated among ever daily smokers) than any other group (32.4%, with the 45-64 group far behind at 16.9% and the other age groups having even lower percentages).

**Table 4.8: Percentages of all adults and of ever daily smokers aged ≥15 years who were former daily smokers, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Former daily smokers[1](among all adults) | | Former daily smokers[1](among ever daily smokers)[2] | |
|---|---|---|---|---|
| | *Percentage (95% CI)* | | | |
| **Overall** | 3.1 | (2.7, 3.7) | 12.9 | (10.9, 15.2) |
| *Gender* | | | | |
| Male | 5.5 | (4.5, 6.7) | 12.0 | (9.9, 14.5) |
| Female | 1.0 | (0.6, 1.6) | 20.7 | (12.9, 31.5) |
| *Age (years)* | | | | |
| 15-24 | 1.1 | (0.5, 2.3) | 11.1 | (5.3, 21.7) |
| 25-44 | 2.3 | (1.7, 3.2) | 7.7 | (5.6, 10.4) |
| 45-64 | 4.9 | (3.7, 6.4) | 16.9 | (12.9, 21.9) |
| 65+ | 6.7 | (4.8, 9.1) | 32.4 | (23.0, 43.4) |
| *Residence* | | | | |
| Urban | 3.3 | (2.7, 4.1) | 12.1 | (9.8, 15.0) |
| Rural | 2.9 | (2.2, 3.7) | 14.2 | (11.0, 18.3) |
| *Education level*[3] | | | | |
| Primary or less | 5.0 | (2.8, 8.8) | 15.9 | (8.8, 27.0) |
| Secondary general | 3.6 | (2.4, 5.2) | 13.9 | (9.7, 19.6) |
| Secondary technical | 4.8 | (3.6, 6.4) | 13.9 | (10.4, 18.3) |
| College or above | 2.8 | (2.1, 3.8) | 11.2 | (8.4, 14.9) |

[1] Current nonsmokers.

[2] Also known as the quit ratio for daily smoking.

[3] Education level is reported only for persons aged 25+ years.

## 4.7. Time Since Quitting Smoking

**Table 4.9** shows the percentage distribution of former daily smokers by time since quitting smoking, both overall and by gender, age, place of residence, and level of education. Consistent with analyses reported above, to be considered a former daily smoker the person had to be a current nonsmoker, not an occasional smoker.

Overall, approximately two out of five (41.3%) former daily smokers had quit smoking ≥10 years earlier. The "5 to <10" (years) and "1 to <5" groups both represented about one-fourth of former daily smokers, at 23.2% and 25.5%, respectively. As expected, those who had quit less than 1 year ago had the lowest percentage, 9.9%.

For quitting ≥10 years ago, the estimates for urban residents (41.8%) and rural residents (40.6%) were quite close, and for 5 to <10 years the estimates by residence were almost identical (23.2% vs. 23.4%). For 1 to <5 years, the estimates were 28.4% for urban and 21.0% for rural, while for <1 year the estimate for urban of 6.6% was less than half the rural estimate (15.0%), albeit the difference was not significant. Notably, a significant difference was found by age for the category of 1 to <5 years since quitting, where those aged 25-44 years had a far higher estimate (45.6%) than those aged 45-64 (12.6%). The estimate for 65+ (14.3%), was also far lower than the estimate for 25-44, but the difference failed to reach significance.

**Table 4.9: Percentage distribution of former daily smokers aged ≥15 years, by time since quitting smoking and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Time Since Quitting Smoking (Years)[1] | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | <1 | | 1 to <5 | | 5 to <10 | | ≥10 | | |
| | *Percentage (95% CI)* | | | | | | | | |
| **Overall** | 9.9 | (6.1, 15.8) | 25.5 | (18.7, 33.6) | 23.2 | (16.6, 31.6) | 41.3 | (32.9, 50.3) | 100 |
| *Gender* | | | | | | | | | |
| Male | 9.1 | (5.1, 15.6) | 22.1 | (15.7, 30.2) | 22.9 | (15.8, 31.9) | 46.0 | (36.5, 55.7) | 100 |
| Female | * | | * | | * | | * | | 100 |
| *Age (years)* | | | | | | | | | |
| 15-24 | * | | * | | * | | * | | 100 |
| 25-44 | 20.1 | (11.3, 33.1) | 45.6 | (30.4, 61.6) | 23.3 | (13.3, 37.4) | 11.1 | (4.4, 25.5) | 100 |
| 45-64 | 5.4 | (2.0, 13.5) | 12.6 | (5.8, 25.2) | 26.6 | (16.4, 40.2) | 55.4 | (42.8, 67.3) | 100 |
| 65+ | 4.8 | (0.7, 27.6) | 14.3 | (4.8, 35.6) | 6.4 | (1.5, 23.7) | 74.5 | (55.2, 87.4) | 100 |
| *Residence* | | | | | | | | | |
| Urban | 6.6 | (2.9, 14.5) | 28.4 | (19.2, 39.9) | 23.2 | (14.1, 35.7) | 41.8 | (29.7, 55.0) | 100 |
| Rural | 15.0 | (8.4, 25.4) | 21.0 | (12.8, 32.6) | 23.4 | (15.3, 34.0) | 40.6 | (30.8, 51.3) | 100 |
| *Education level*[2] | | | | | | | | | |
| Primary or less | * | | * | | * | | * | | 100 |
| Secondary general | 13.2 | (5.1, 30.2) | 27.2 | (13.4, 47.2) | 14.1 | (6.8, 27.1) | 45.5 | (30.9, 61.0) | 100 |
| Secondary technical | 9.6 | (4.1, 20.7) | 26.5 | (14.7, 42.9) | 20.1 | (10.5, 35.3) | 43.8 | (28.1, 60.8) | 100 |
| College or above | 9.4 | (3.7, 21.6) | 23.8 | (12.3, 41.0) | 33.0 | (18.2, 52.2) | 33.8 | (17.0, 55.9) | 100 |

[1] Among former daily smokers (current nonsmokers).

[2] Education level is reported only for persons aged 25+ years.

* Indicates estimate wasbased on fewer than 25 unweighted cases and thus was suppressed.

## 4.8. Prevalence of Smoked and Smokeless Tobacco Use among Current Tobacco Users

Table 4.10 shows the percentage of current tobacco users aged ≥15 years using smoked only, smokeless only, and both types of tobacco; estimates are provided overall and by gender, age, residence, and education. Among all tobacco users, 94.2% used smoked tobacco only, 2.2% used only smokeless tobacco, and 3.6% used both types. Among male current users, 93.5% used only smoked tobacco; 2.5%, only smokeless; and 4.0%, both types. All of the women surveyed who were current tobacco users consumed only smoked products.

Current tobacco users who were rural residents (4.0%) were more likely than urban dwellers (1.2%) to use smokeless only.

In all, 3.6% of the current users of tobacco used both smoked and smokeless; for men the rate was 4.0%. Those with little education (primary or less) had by far the highest rate of dual use, at 14.7%.

**Table 4.10: Percentage distribution of current tobacco users aged ≥15 years by type of use and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Current tobacco users[1] | | Type of Current Use | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | Smoked only | | Smokeless only | | Both smoked and smokeless | | |
| | | | *Percentage (95% CI)* | | | | | | |
| **Overall** | 22.9 | (21.2, 24.7) | 94.2 | (92.1, 95.7) | 2.2 | (1.4, 3.5) | 3.6 | (2.3, 5.5) | 100 |
| *Gender* | | | | | | | | | |
| Male | 43.4 | (40.6, 46.3) | 93.5 | (91.2, 95.3) | 2.5 | (1.6, 3.9) | 4.0 | (2.6, 6.1) | 100 |
| Female | 4.5 | (3.5, 5.8) | 100.0 | | 0.0 | | 0.0 | | 100 |
| *Age (years)* | | | | | | | | | |
| 15-24 | 10.6 | (8.5, 13.2) | 90.0 | (80.9, 95.1) | 4.1 | (1.4, 11.0) | 5.9 | (2.3, 14.5) | 100 |
| 25-44 | 30.0 | (27.4, 32.8) | 95.0 | (92.4, 96.7) | 1.5 | (0.7, 3.1) | 3.5 | (2.0, 6.1) | 100 |
| 45-64 | 25.1 | (22.1, 28.3) | 95.2 | (91.2, 97.4) | 1.5 | (0.6, 4.1) | 3.3 | (1.6, 6.6) | 100 |
| 65+ | 15.4 | (11.7, 20.0) | 89.5 | (82.7, 93.8) | 8.8 | (4.9, 15.2) | 1.7 | (0.3, 7.9) | 100 |
| *Residence* | | | | | | | | | |
| Urban | 25.9 | (23.4, 28.6) | 95.6 | (93.7, 97.0) | 1.2 | (0.7, 2.1) | 3.1 | (1.8, 5.4) | 100 |
| Rural | 19.0 | (16.9, 21.3) | 91.6 | (86.7, 94.9) | 4.0 | (2.1, 7.3) | 4.4 | (2.2, 8.4) | 100 |
| *Education level*[2] | | | | | | | | | |
| Primary or less | 26.7 | (20.2, 34.4) | 85.3 | (68.1, 94.0) | 0.0 | | 14.7 | (6.0, 31.9) | 100 |
| Secondary general | 24.4 | (20.6, 28.7) | 93.6 | (88.4, 96.5) | 4.1 | (1.7, 9.1) | 2.4 | (0.9, 5.9) | 100 |
| Secondary technical | 31.2 | (27.7, 35.0) | 96.1 | (94.0, 97.5) | 1.4 | (0.4, 5.3) | 2.5 | (1.1, 5.5) | 100 |
| College or above | 24.2 | (21.6, 27.1) | 95.5 | (91.6, 97.6) | 1.7 | (0.7, 4.2) | 2.8 | (1.4, 5.5) | 100 |

[1] Includes daily and occasional (less than daily) smokers or smokeless users.

[2] Education level is reported only for persons aged 25+ years.

## 4.9. Time to First Smoke Upon Waking Up

An established measure for evaluating nicotine dependence is the time between awakening and smoking the first cigarette of the day. Table 4.11 shows the distribution of daily smokers by time to first smoke after waking up both overall and by gender, age, residence, and education. Among daily smokers in total, 12.2% took their first smoke in 5 minutes or less after waking up, while for 38.7% the initial smoke was within 6-30 minutes of awakening; thus, essentially half of the group of interest (50.9%) showed symptoms of high nicotine dependence. The survey found that 29.4% of daily users smoked within 31-60 minutes after awakening, and 19.7% waited more than an hour before having a smoke. Figure 4.4 shows the distribution of time to first smoke after waking up in the morning among daily smokers by gender.

An examination of daily smokers aged 15-24 years found that 7.0% smoked in the first 5 minutes after awakening and 29.8% did so in the first 6-30 minutes;31.7% had their first smoke within 31-60 minutes, and 31.4% waited more than 1 hour before lighting up. Thus, 36.8% of this youngest group showed a high level of nicotine dependence (i.e., smoked within 30 minutes after awakening). Analyses by gender showed that just over half of the men (51.6%) but less than half of the women (43.8%) displayed high nicotine dependence (smoking in the first 30 minutes). Results by residence (urban, rural) were reasonably close to the overall findings when looking at indications of high levels of nicotine dependence.

**Figure 4.4: Time to first smoke upon waking among daily smokers aged ≥15 years, overall and by gender– GATS Kazakhstan, 2014.**

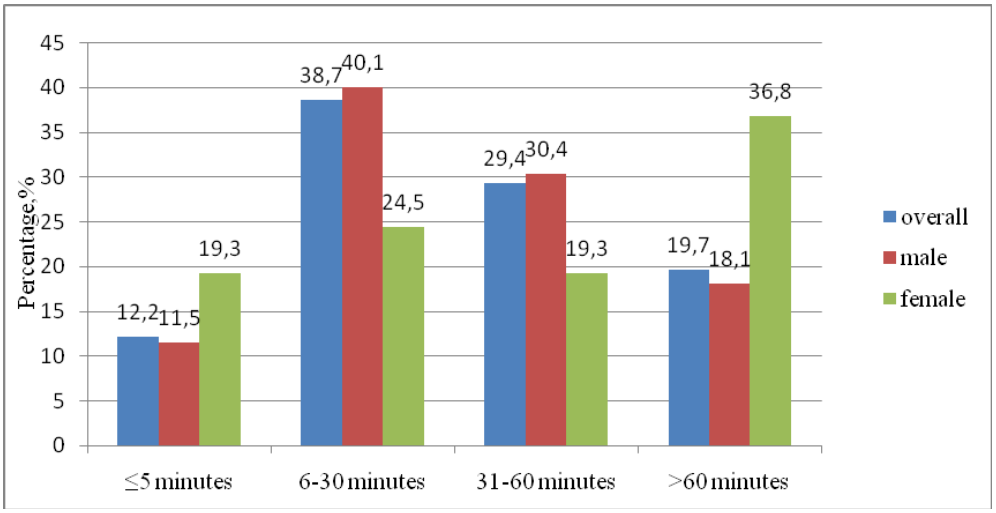


**Table 4.11: Percentage distribution of daily smokers aged ≥15 years, by time to first smoke after waking up and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Time to First Smoke | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | ≤5 minutes | | 6-30 minutes | | 31-60 minutes | | >60 minutes | | |
| | *Percentage (95% CI)* | | | | | | | | |
| **Overall** | 12.2 | (9.8, 15.1) | 38.7 | (34.6, 43.1) | 29.4 | (25.8, 33.3) | 19.7 | (16.5, 23.3) | 100 |
| *Gender* | | | | | | | | | |
| Male | 11.5 | (9.2, 14.3) | 40.1 | (35.9, 44.4) | 30.4 | (26.5, 34.5) | 18.1 | (14.7, 22.0) | 100 |
| Female | 19.3 | (9.4, 35.6) | 24.5 | (14.4, 38.6) | 19.3 | (11.1, 31.3) | 36.8 | (26.6, 48.5) | 100 |
| *Age (years)* | | | | | | | | | |
| 15-24 | 7.0 | (2.9, 15.9) | 29.8 | (18.5, 44.4) | 31.7 | (18.4, 49.0) | 31.4 | (19.5, 46.2) | 100 |
| 25-44 | 11.2 | (8.3, 15.0) | 39.2 | (33.7, 45.0) | 28.7 | (24.2, 33.6) | 20.9 | (16.9, 25.4) | 100 |
| 45-64 | 14.7 | (9.4, 22.2) | 38.0 | (30.5, 46.1) | 31.9 | (24.7, 40.2) | 15.4 | (10.6, 21.8) | 100 |
| 65+ | 15.8 | (7.8, 29.2) | 50.8 | (37.3, 64.3) | 19.6 | (11.0, 32.6) | 13.7 | (6.7, 26.3) | 100 |
| *Residence* | | | | | | | | | |
| Urban | 12.9 | (9.7, 16.9) | 36.6 | (31.8, 41.7) | 29.0 | (24.2, 34.4) | 21.5 | (17.4, 26.2) | 100 |
| Rural | 11.0 | (8.0, 14.9) | 42.5 | (35.1, 50.3) | 30.0 | (24.9, 35.6) | 16.5 | (11.6, 22.8) | 100 |
| *Education level*[1] | | | | | | | | | |
| Primary or less | 15.4 | (7.9, 27.8) | 52.5 | (37.7, 66.8) | 20.2 | (11.5, 33.0) | 12.0 | (5.5, 24.0) | 100 |
| Secondary general | 13.7 | (8.8, 20.7) | 37.9 | (29.6, 46.9) | 31.3 | (24.5, 39.0) | 17.1 | (11.7, 24.4) | 100 |
| Secondary technical | 15.6 | (11.1, 21.3) | 40.1 | (32.2, 48.5) | 33.7 | (27.2, 41.0) | 10.7 | (7.6, 14.9) | 100 |
| College or above | 8.3 | (5.4, 12.5) | 37.5 | (30.8, 44.7) | 24.4 | (17.5, 32.9) | 29.8 | (23.4, 37.2) | 100 |

[1] Education level is reported only for persons aged 25+ years.

## 4.10. Electronic Cigarette Users

**Table 4.12** presents data on awareness and use of electronic cigarettes (e-cigarettes), both overall and by gender, age, residence, and education. Overall, 53.7% of adults aged 15 or over had heard of e-cigarettes, but men (64.1%) were significantly more aware of them than were women (44.4%).

An estimated 19.5% of the oldest age group (65+) had ever heard of e-cigarettes, a finding that contrasts sharply with the estimate for adults aged 25-44 (62.2%). The 15-24 age group had the second-highest level of awareness (59.6%), a finding that did not differ significantly from the result for the 25-44 group.

Significantly more urban residents (63.4%) than rural dwellers (41.0%) had ever heard of e-cigarettes. By education, only 26.3% of adults with a primary education or less had ever heard of e-cigarettes, far below the estimate for those with a college education or more (63.8%).

Overall, 7.2% of adults had ever used an e-cigarette; men (11.3%) were 3.2 times as likely as women (3.5%) to have ever used one. As expected, urban residents (9.9%) were much more likely than rural residents (3.7%) to have ever used such a product.

In terms of education, the percentage of ever use ranged from3.3% for those with a primary education or less to 9.8% for those with at least a college education.

Regarding current use of e-cigarettes, the estimate was just 1.7% overall, 2.5% for men and just 0.9% for women. By location, the survey found that urbanites were significantly more likely than those living in rural areas to be current users (2.3% vs. 0.8%).

**Table 4.12: Electronic cigarette awareness and use among adults aged ≥15 years by selected demographic characteristics - GATS Kazakhstan, 2014.**

| Demographic characteristic | Ever heard of electronic cigarettes[1] | | Ever used an electronic cigarette[1] | | Current user of electronic cigarettes[1,2] | |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| **Overall** | 53.7 | (50.9, 56.4) | 7.2 | (6.0, 8.6) | 1.7 | (1.2, 2.4) |
| *Gender* | | | | | | |
| Male | 64.1 | (60.5, 67.5) | 11.3 | (9.6, 13.3) | 2.5 | (1.7, 3.5) |
| Female | 44.4 | (41.2, 47.6) | 3.5 | (2.5, 5.0) | 0.9 | (0.5, 1.7) |
| *Age (years)* | | | | | | |
| 15-24 | 59.6 | (54.3, 64.6) | 7.4 | (5.4, 9.9) | 1.9 | (1.0, 3.4) |
| 25-44 | 62.2 | (58.9, 65.5) | 10.6 | (8.7, 12.7) | 2.4 | (1.6, 3.6) |
| 45-64 | 47.2 | (43.7, 50.7) | 4.3 | (3.3, 5.8) | 0.9 | (0.5, 1.7) |
| 65+ | 19.5 | (15.8, 23.9) | 0.4 | (0.1, 2.1) | 0.1 | (0.0, 0.4) |
| *Residence* | | | | | | |
| Urban | 63.4 | (60.6, 66.2) | 9.9 | (8.0, 12.2) | 2.3 | (1.5, 3.5) |
| Rural | 41.0 | (35.9, 46.2) | 3.7 | (2.8, 4.9) | 0.8 | (0.5, 1.4) |
| *Education level*[3] | | | | | | |
| Primary or less | 26.3 | (20.6, 32.9) | 3.3 | (1.5, 6.9) | 1.4 | (0.5, 4.3) |
| Secondary general | 36.3 | (31.5, 41.3) | 4.0 | (2.6, 6.1) | 0.7 | (0.3, 1.8) |
| Secondary technical | 54.0 | (50.2, 57.8) | 6.9 | (5.0, 9.5) | 1.2 | (0.7, 2.1) |
| College or above | 63.8 | (59.7, 67.6) | 9.8 | (8.0, 12.1) | 2.5 | (1.6, 4.1) |

[1] Among all adults.
[2] Current use includes daily or less than daily use.
[3] Education level is reported only for persons aged 25+ years.

# 5. CESSATION

Currently, tobacco addiction is classified as a disease. In the Tenth International Classification of Diseases (ICD-10), tobacco, drug, and alcohol addiction are all classified as «mental and behavioral disorders due to use of psychoactive compounds.» Thus, nicotine dependence should be treated as a pathological condition that should be followed by diagnosis and treatment. Correspondingly, eliminating nicotine addiction is a key element in preventive medicine. In the RK, treatment for tobacco dependence is carried out in drug treatment clinics. Unfortunately, tobacco users visiting these clinics usually do not get evidence-based treatment protocols, as the clinics are primarily designed to treat people suffering from alcoholism or drug addiction. To treat tobacco addiction, psychiatrists use hypnosis, acupuncture, and cognitive/behavioral therapy. These services are not available in all areas of the country but, regardless, most of them are ineffective and their efficacy has not been established in the scientific literature. Currently, according to the state health care program Salamatty Kazakhstan, the primary health care system in the RK is being reformed; preventive services and departments of social and psychological care in the outpatient setting are being opened for the population as well as antismoking rooms for the prevention of behavioral risk factors, including rooms for patients who smoke who want to quit this practice [16].

This chapter presents data on smoking cessation, behavior regarding the seeking of health care and counseling/advice, and the use of cessation methods as well as interest in quitting.

***Key findings:***

- *In all, 3 out of 10 smokers had tried to quit in the past 12 months.*
- *Just over three-fourths (76.5%) of smokers who tried to quit smoking in the past 12 months did not use any assistance, but 23.4% used pharmacotherapy in their attempt to quit.*
- *About three-fifths (59.0%) of smokers who had visited a health care provider in the past 12 months had been asked by a provider if they were a smoker.*
- *Somewhat less than half (46.6%) of smokers who had seen a health care provider in the past 12 months had received advice from such a professional to quit.*
- *In all, 64% of smokers (defined here as current daily or less than daily smokers) were planning to quit at some point or at least thinking about doing so.*

## 5.1 Smoking Cessation and Use of Cessation Methods

**Table 5.1** shows the percentage of adult smokers (defined as current smokers and former smokers who had been abstinent for less than 12 months) who had attempted to quit smoking in the past 12 months and provides data on the cessation methods they used, including pharmacotherapy, counseling/advice, quitting without assistance, traditional medicine (acupuncture, reflexology), psychotherapy, switching to smokeless tobacco, and other methods.

In all, 29.5%of those in the group of interest had tried to quit smoking in the past 12 months (men, 28.9%;women, 34.3%). Percentages were similar when examined by geography:30.7% for urban and 27.4% for rural. By age, estimates ranged from 33.0% in the 45-64 group to 14.1% in the oldest group (65+).

The most common method among those who had tried to quit in the last 12 months was trying to do so without any assistance, employed by 76.5% of the group overall. This was the dominant approach for both genders, with estimates of 77.0% for men and 72.7% for women, and for both urban (79.6%) and rural (70.1%) residents.

Notably, overall the proportion using pharmacotherapy was fairly high, at 23.4%, with no other specific method used by more than 10.2%. The latter estimate was for counseling/advice in health care organizations or in specialized cessation clinics; switching to smokeless tobacco was tried by 7.8%. Estimates for other specific methods were quite low. The survey did not show differences between the choice of a cessation method and gender, age, or residence.

**Table 5.1: Percentage of smokers aged ≥15 years who attempted to quit smoking in the past 12 months and cessation methods used, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Made quit attempt[1] | | Method[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Pharmacotherapy[3] | | Counseling/advice[4] | | Attempted to quit without assistance | | Traditional medicines | |
| **Overall** | 29.5 | (26.3, 32.9) | 23.4 | (18.0, 29.9) | 10.2 | (6.2, 16.4) | 76.5 | (69.2, 82.5) | 2.1 | (0.9, 5.2) |
| *Gender* | | | | | | | | | | |
| Male | 28.9 | (25.6, 32.5) | 21.7 | (16.5, 27.8) | 9.3 | (5.4, 15.3) | 77.0 | (69.3, 83.2) | 1.4 | (0.5, 4.5) |
| Female | 34.3 | (25.4, 44.5) | 35.7 | (18.7, 57.3) | 17.1 | (5.1, 44.5) | 72.7 | (54.8, 85.4) | 7.0 | (1.7, 25.1) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 25.2 | (16.4, 36.6) | * | | * | | * | | * | |
| 25-44 | 30.0 | (25.9, 34.5) | 26.0 | (19.3, 34.0) | 10.1 | (5.6, 17.6) | 72.8 | (63.8, 80.2) | 2.2 | (0.7, 6.6) |
| 45-64 | 33.0 | (26.9, 39.8) | 20.7 | (12.6, 32.0) | 8.3 | (2.9, 21.6) | 79.2 | (68.3, 87.1) | 1.4 | (0.2, 9.8) |
| 65+ | 14.1 | (7.0, 26.3) | * | | * | | * | | * | |
| *Residence* | | | | | | | | | | |
| Urban | 30.7 | (26.7, 35.1) | 27.0 | (20.0, 35.3) | 12.0 | (6.7, 20.4) | 79.6 | (70.4, 86.5) | 2.5 | (0.9, 6.7) |
| Rural | 27.4 | (22.3, 33.1) | 16.3 | (8.7, 28.2) | 6.7 | (2.5, 17.1) | 70.1 | (58.0, 79.9) | 1.4 | (0.2, 9.7) |
| *Education level*[5] | | | | | | | | | | |
| Primary or less | 20.6 | (11.4, 34.1) | * | | * | | * | | * | |
| Secondary general | 30.6 | (23.8, 38.4) | 16.8 | (7.9, 32.3) | 14.5 | (6.8, 28.0) | 83.0 | (70.9, 90.7) | 0.0 | |
| Secondary technical | 27.4 | (22.3, 33.1) | 22.3 | (13.6, 34.4) | 8.4 | (3.2, 20.3) | 71.6 | (58.1, 82.1) | 1.3 | (0.2, 8.9) |
| College or above | 34.2 | (28.5, 40.5) | 30.4 | (20.6, 42.4) | 9.1 | (3.7, 20.5) | 74.9 | (64.1, 83.3) | 3.4 | (1.1, 10.2) |

[1] Among current smokers and former smokers who had been abstinent for less than 12 months.

[2] Among current smokers who made a quit attempt in the past 12 months and former smokers who had been abstinent for less than 12 months.

[3] Pharmacotherapy includes nicotine replacement therapy and prescription medications.

[4] Includes counseling at smoking cessation clinics and in health care settings.

[5] Education level is reported only for persons aged 25+ years.

* Indicates the estimate was based on fewer than 25 unweighted cases and thus was suppressed.

**Table 5.1 (cont.): Percentage of smokers aged ≥15 years who attempted to quit smoking in the past 12 months and cessation methods used, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Method[2] | | | | | |
|---|---|---|---|---|---|---|
| | Psychotherapy | | Switching to smokeless tobacco | | Other methods | |
| **Overall** | 4.1 | (2.4, 6.8) | 7.8 | (4.7, 12.6) | 11.0 | (7.3, 16.4) |
| *Gender* | | | | | | |
| Male | 2.9 | (1.3, 6.7) | 8.0 | (4.9, 12.8) | 9.8 | (5.9, 15.9) |
| Female | 12.1 | (4.2, 30.2) | 6.4 | (1.5, 23.2) | 19.4 | (8.7, 37.8) |
| *Age (years)* | | | | | | |
| 15-24 | * | | * | | * | |
| 25-44 | 2.3 | (0.7, 7.4) | 11.3 | (6.2, 19.5) | 12.9 | (8.2, 19.6) |
| 45-64 | 7.1 | (2.9, 16.3) | 2.8 | (1.8, 4.3) | 7.1 | (2.9, 16.3) |
| 65+ | * | | * | | * | |
| *Residence* | | | | | | |
| Urban | 5.1 | (3.0, 8.6) | 8.5 | (4.4, 15.7) | 12.4 | (7.5, 19.8) |
| Rural | 1.9 | (0.4, 8.5) | 6.3 | (3.7, 10.7) | 8.1 | (3.7, 16.7) |
| *Education level*[5] | | | | | | |
| Primary or less | * | | * | | * | |
| Secondary general | 0.0 | | 10.8 | (3.9, 26.5) | 13.5 | (5.6, 29.0) |
| Secondary technical | 3.6 | (0.5, 21.6) | 4.1 | (1.6, 10.1) | 9.9 | (3.1, 27.3) |
| College or above | 6.3 | (2.7, 14.0) | 10.1 | (5.4, 18.1) | 10.3 | (5.5, 18.5) |

[1] Among current smokers and former smokers who had been abstinent for less than 12 months.

[2] Among current smokers who made a quit attempt in the past 12 months and former smokers who had been abstinent for less than 12 months.

[3] Pharmacotherapy includes nicotine replacement therapy and prescription medications.

[4] Includes counseling at smoking cessation clinics and in health care settings.

[5] Education level is reported only for persons aged 25+ years.

[*] Indicates estimate was based on fewer than 25 unweighted cases and thus was suppressed.

## 5.2. Visits by Smokers to a Health Care Provider, Being Asked about Smoking, and Receipt of Advice to Quit

**Table 5.2** shows the percentage distribution of past-year smokers (defined as current smokers and former smokers who had been abstinent for less than 12 months) by their number of visits to a health care provider in the past 12 months.The table also shows percentages of smokers with at least one visit who had been asked by a provider whether they smoked and whether they had been advised by a provider to quit.

In all, 36.5% of smokers had visited a health care provider in the last 12 months at least once, 35.2% of males and 47.0% of females. These proportions were not significantly different by age group or urban rural status.

In all, 59.0% of smokers who had visited a health care professional in the past 12 months had been asked by a provider in that time if they smoked tobacco. This is a very positive result, and it could well be attributed to the fact that in 2011 a system of national screening examinations of the target population in the RK was put in place to identify risk factors and the presence of noncommunicable diseases. In GATS, the estimate for females (41.1%) was well below that for males (62.0%), although the difference was not significant. No significant difference between the urban and rural areas, or by education level, were found.

The survey revealed that 46.6% of smokers who had visited a health care provider in the last 12 months had received counseling/advice to quit smoking from such a person during the time period in question. More male smokers (49.8%) than female smokers (27.9%) had received advice, although the difference was not significant. No significant differences were observed by age group or urban/rural status.

**Table 5.2: Percentages of smokers aged ≥15 years who visited a health care provider and were asked if they smoked and received advice to quit in the past 12 months, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | Visits to an HCP in the Last 12 Months[1,2] | | | | | | | | Asked by HCP if a Smoker[2,3] | | Advised to Quit by HCP[2,3] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 or 2 | | 3 to 5 | | 6 or more | | 1 or More | | | | | |
| | *Percentage (95% CI)* | | | | | | | | | | | |
| **Overall** | 27.6 | (23.5, 32.0) | 6.5 | (4.7, 8.9) | 2.4 | (1.3, 4.6) | 36.5 | (31.7, 41.5) | 59.0 | (52.8, 65.0) | 46.6 | (40.2, 53.1) |
| *Gender* | | | | | | | | | | | | |
| Male | 26.5 | (22.2, 31.3) | 6.8 | (5.0, 9.0) | 1.9 | (1.1, 3.4) | 35.2 | (30.3, 40.4) | 62.0 | (55.6, 68.1) | 49.8 | (42.6, 57.0) |
| Female | 36.4 | (26.8, 47.2) | 4.0 | (1.1, 14.0) | 6.6 | (2.2, 18.2) | 47.0 | (35.5, 58.9) | 41.1 | (22.8, 62.3) | 27.9 | (15.7, 44.4) |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 36.4 | (24.0, 51.0) | 5.3 | (1.3, 19.2) | 7.3 | (3.7, 13.9) | 49.1 | (35.5, 62.9) | 41.3 | (25.8, 58.8) | 32.2 | (19.6, 47.9) |
| 25-44 | 26.3 | (21.8, 31.5) | 3.9 | (2.3, 6.5) | 2.0 | (0.7, 5.6) | 32.2 | (26.7, 38.2) | 58.0 | (49.5, 66.0) | 43.7 | (35.1, 52.8) |
| 45-64 | 27.2 | (20.7, 34.7) | 9.9 | (6.6, 14.7) | 1.8 | (0.7, 4.8) | 38.9 | (31.3, 47.0) | 68.8 | (57.4, 78.3) | 56.3 | (44.1, 67.7) |
| 65+ | 25.2 | (15.7, 37.8) | 14.9 | (7.5, 27.4) | 1.0 | (0.1, 6.8) | 41.1 | (29.0, 54.3) | 57.0 | (36.0, 75.7) | 50.7 | (31.2, 70.0) |
| *Residence* | | | | | | | | | | | | |
| Urban | 28.4 | (23.1, 34.3) | 6.6 | (4.3, 10.1) | 2.6 | (1.1, 6.0) | 37.6 | (31.1, 44.4) | 61.7 | (53.8, 69.0) | 51.4 | (42.9, 59.9) |
| Rural | 26.2 | (20.3, 33.0) | 6.2 | (3.9, 9.7) | 2.2 | (1.0, 4.7) | 34.6 | (28.1, 41.6) | 53.9 | (43.8, 63.7) | 37.1 | (28.2, 46.9) |
| *Education level*[4] | | | | | | | | | | | | |
| Primary or less | 19.5 | (12.0, 30.2) | 5.5 | (2.0, 14.1) | 2.2 | (0.3, 13.6) | 27.2 | (17.7, 39.3) | * | | * | |
| Secondary general | 27.1 | (20.0, 35.5) | 5.7 | (2.7, 11.8) | 0.0 | | 32.8 | (25.2, 41.4) | 53.4 | (38.6, 67.6) | 43.2 | (29.1, 58.4) |
| Secondary technical | 23.3 | (17.8, 29.8) | 9.9 | (6.3, 15.4) | 2.0 | (0.8, 4.8) | 35.2 | (28.3, 42.8) | 61.9 | (50.9, 71.8) | 47.1 | (35.8, 58.6) |
| College or above | 30.8 | (23.9, 38.7) | 4.1 | (2.4, 6.8) | 2.8 | (0.9, 8.1) | 37.7 | (30.1, 45.9) | 65.2 | (54.6, 74.5) | 53.4 | (42.0, 64.5) |

[1] Among current smokers and former smokers who had been abstinent for less than 12 months.

[2] HCP = health care provider.

[3] Among current smokers and former smokers who had been abstinent for less than 12 months and who had visited an HCP during the past 12 months.

[4] Education level is reported only for persons aged 25+ years.

* Indicates estimate was based on fewer than 25 unweighted cases and thus was suppressed.

### 5.3. The Level of Interest in Quitting Smoking

Interest in smoking cessation among current smokers was reported in five categories: (1) planning to quit within next month;(2) thinking about quitting within next 12 months;(3) will quit someday, but not in the next 12 months;(4) not interested in quitting smoking; and (5) do not know. **Figure 5.1** and **Table 5.3** present data on these five categories.

In all, 64% of current smokers showed an interest in quitting (3.6% of current smokers planned to quit within the next month; 12.6% were thinking about quitting in the next 12 months; and a much larger group, 47.7%,were planning to quit someday, but not in the next 12 months. Just 18.2% of smokers were not interested in quitting, and the survey found that another 18.0% did not know.) By gender, estimates for planning to quit within the next month were 3.5% for males and 4.5% for females, while for thinking about quitting within the next 12 months they were 12.0% for males and 17.2% for females. No significant differences by demographic characteristics were found for either of these measures.

In examining responses by age, the proportion of smokers who wanted to quit, but not in the next 12 months, was lower in the 65+ group (20.1%) than it was in any of the other three age groups (15-24, 48.3%; 25-44, 51.2%; 45-64, 46.5%). Correspondingly, the oldest age group had a much higher percentage of smokers who were not interested in quitting (54.7%) than did the other age groups, where the next highest percentage was just 21.0 % (ages 45-64).

**Figure 5.1: Interest in quitting smoking among current smokers aged ≥15 years– GATS Kazakhstan, 2014. (percentage,%)**

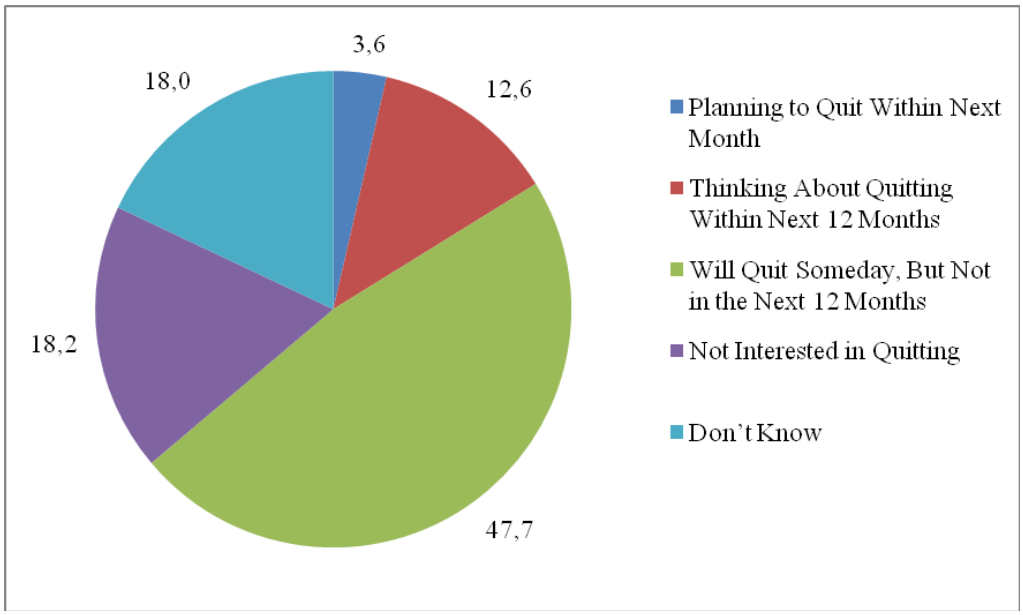


**Table 5.3: Percentage distribution of current smokers aged ≥15 years by interest in quitting smoking according to selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Interest in Quitting Smoking[1] | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Planning to quit within next month | | Thinking about quitting within next 12 months | | Will quit someday, but not in the next 12 months | | Not interested in quitting | | Don't know | | |
| | *Percentage (95% CI)* | | | | | | | | | | |
| **Overall** | 3.6 | (2.5, 5.2) | 12.6 | (10.1, 15.5) | 47.7 | (43.9, 51.5) | 18.2 | (15.5, 21.2) | 18.0 | (14.9, 21.6) | 100 |
| *Gender* | | | | | | | | | | | |
| Male | 3.5 | (2.3, 5.2) | 12.0 | (9.9, 14.5) | 47.9 | (44.1, 51.8) | 18.5 | (15.7, 21.6) | 18.1 | (14.9, 21.8) | 100 |
| Female | 4.5 | (1.7, 11.7) | 17.2 | (8.0, 33.2) | 45.7 | (33.9, 58.0) | 15.5 | (8.0, 27.9) | 17.1 | (10.5, 26.6) | 100 |
| *Age (years)* | | | | | | | | | | | |
| 15-24 | 5.3 | (2.1, 12.5) | 12.2 | (6.2, 22.5) | 48.3 | (36.9, 59.8) | 12.0 | (6.6, 21.0) | 22.3 | (14.3, 32.9) | 100 |
| 25-44 | 3.0 | (1.7, 5.0) | 13.6 | (10.6, 17.3) | 51.2 | (46.1, 56.2) | 13.9 | (11.1, 17.3) | 18.4 | (14.4, 23.2) | 100 |
| 45-64 | 4.7 | (2.7, 8.3) | 11.2 | (7.4, 16.6) | 46.5 | (39.6, 53.6) | 21.0 | (16.0, 27.1) | 16.5 | (11.5, 23.1) | 100 |
| 65+ | 0.8 | (0.1, 5.6) | 10.4 | (3.6, 26.4) | 20.1 | (10.7, 34.5) | 54.7 | (39.7, 68.9) | 14.0 | (7.6, 24.4) | 100 |
| *Residence* | | | | | | | | | | | |
| Urban | 4.1 | (2.6, 6.3) | 12.8 | (9.5, 17.1) | 49.3 | (44.2, 54.4) | 19.5 | (16.1, 23.4) | 14.3 | (10.9, 18.6) | 100 |
| Rural | 2.7 | (1.5, 4.8) | 12.0 | (9.3, 15.4) | 44.7 | (39.3, 50.2) | 15.7 | (11.8, 20.5) | 24.8 | (19.3, 31.3) | 100 |
| *Education level*[2] | | | | | | | | | | | |
| Primary or less | 2.6 | (0.4, 16.2) | 12.9 | (6.8, 23.0) | 33.9 | (22.7, 47.2) | 30.5 | (17.7, 47.2) | 20.2 | (8.5, 40.6) | 100 |
| Secondary general | 1.7 | (0.5, 5.4) | 9.9 | (6.3, 15.3) | 47.0 | (38.3, 55.9) | 19.9 | (14.6, 26.6) | 21.4 | (15.4, 29.0) | 100 |
| Secondary technical | 2.7 | (1.3, 5.6) | 9.7 | (6.3, 14.6) | 48.1 | (42.1, 54.1) | 19.6 | (15.0, 25.1) | 20.0 | (15.1, 25.9) | 100 |
| College or above | 5.3 | (3.2, 8.7) | 17.1 | (12.5, 23.1) | 50.3 | (43.5, 57.1) | 14.9 | (11.1, 19.8) | 12.3 | (8.6, 17.3) | 100 |

[1] Among current daily or less than daily smokers.

[2] Education level is reported only for persons aged 25+ years.

# 6. SECONDHAND SMOKE

Secondhand smoke causes 1 in 10 deaths associated with tobacco use, and creating a 100% smoke-free environment is the only way to protect people from the harmful effects of secondhand smoke [1].

In Kazakhstan, smoking is prohibited in educational institutions, health care and cultural organizations; public catering; public places intended for public recreation; in public transport, the buildings at airports, rail, road, and water stations; in state bodies and organizations; in the workplace; and in doorways, except in designated smoking areas (see Chapter 1.2 of the present report).

This chapter presents data on exposure to passive smoking in the workplace, at home, and in public places.

***Key findings:***

- *Among all adults who worked indoors, 19.0% (1.2 million people) were exposed to second hand smoke in the workplace.*
- *An estimated 13.4% of nonsmokers, or 617.5 thousand people, who worked indoors were exposed at work).*
- *Almost one-seventh (13.8%, or 1.6 million people) of Kazakhstan adults were exposed to tobacco smoke at home.*
- *Exposure to secondhand smoke in public places was common. Among adults who had visited various public places in the last 30 days, estimates for exposure during that period were 33.0% of adults for any of these places, 9.9% for government buildings, 17.2% for private workplaces, 9.7% for health care facilities, 7.8% for schools, 24.1% for colleges/universities, 27.6% for restaurants, 70.4% for bars or nightclubs, 29.7% for cafes/ cafeterias, and 18.1%for public transport.*

## 6.1. Exposure to Tobacco Smoke in Indoor Workplaces

Overall, 19.0% of adults (1179.1 thousand people) who worked indoors were exposed to secondhand smoke in the workplace (**Table 6.1**); more than half of these people were nonsmokers (617.5 thousand). Male indoor workers had greater prevalence of exposure than their female counterparts to be exposed, 24.7%to 12.9%. The prevalence of exposure did not differ significantly by residence, 18.0% for urban workers and 21.1% for those in rural areas.

Among nonsmokers who worked indoors, males had greater prevalence of exposure than their female counterparts at work (16.3% vs. 11.5%), but this difference was not significant.

**Table 6.1: Percentage and number of adults aged ≥15 years who worked indoors and were exposed to tobacco smoke at work, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Exposed at Work[1] | | | | | |
|---|---|---|---|---|---|---|
| | Overall | | | Nonsmokers | | |
| | *Percentage (95% CI)* | | *Number in thousands* | *Percentage (95% CI)* | | *Number in thousands* |
| **Overall** | 19.0 | (16.0, 22.5) | 1 179.1 | 13.4 | (10.7, 16.7) | 617.5 |
| *Gender* | | | | | | |
| Male | 24.7 | (20.7, 29.1) | 794.1 | 16.3 | (12.5, 21.0) | 295.1 |
| Female | 12.9 | (9.7, 17.1) | 385.0 | 11.5 | (8.6, 15.4) | 322.4 |
| *Age (years)* | | | | | | |
| 15-24 | 14.8 | (9.9, 21.7) | 228.6 | 11.8 | (7.2, 18.6) | 159.6 |
| 25-44 | 21.1 | (17.4, 25.4) | 610.2 | 14.9 | (11.7, 18.7) | 294.9 |
| 45-64 | 19.2 | (15.3, 23.8) | 333.0 | 12.7 | (9.4, 16.9) | 159.4 |
| 65+ | * | | * | * | | * |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Residence* | | | | | | |
| Urban | 18.0 | (13.9, 22.8) | 720.0 | 12.3 | (8.8, 16.9) | 357.2 |
| Rural | 21.1 | (16.9, 25.9) | 459.1 | 15.3 | (11.4, 20.3) | 260.3 |
| *Education level*[2] | | | | | | |
| Primary or less | * | | * | * | | * |
| Secondary general | 23.3 | (17.1, 30.8) | 136.2 | 18.2 | (11.9, 26.8) | 70.3 |
| Secondary technical | 22.9 | (18.6, 27.8) | 341.7 | 15.5 | (11.3, 20.9) | 153.0 |
| College or above | 18.1 | (14.4, 22.6) | 456.9 | 12.1 | (9.1, 16.0) | 224.3 |

[1] In the past 30 days. Calculated for persons working outside of the home who usually worked indoors or both indoors and outdoors.

[2] Education level is reported only for persons aged 25+ years.

* Indicates estimate was based on fewer than 25 unweighted cases and thus was suppressed.

## 6.2. Exposure to Tobacco Smoke at Home

Respondents to the survey were considered to have been exposed to tobacco smoke at home if they reported that smoking occurred there daily, weekly, or monthly. **Table 6.2** shows that 13.8% of adults (1.6 million people) were exposed to secondhand smoke at home. Men (16.7%, or 913.1 thousand people) were more likely to be have been exposed than women (11.4%, or 722.9 thousand people). Overall, 15.5% of adults from urban areas and 11.5% of adults from rural areas were exposed to secondhand smoke at home.

Among nonsmoking adults, the proportion exposed to tobacco smoke at home was 8.5% (779.1 thousand people). The rate for women (9.5%) was somewhat higher than the rate for men (6.5%), but the difference was not significant. By residence, the values were 8.6% for urban and 8.2% for rural. Education level was not associated with significant differences in the estimates.

**Table 6.2: Percentage and number of adults aged ≥15 years who were exposed to tobacco smoke at home, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Exposed at Home[1] | | | | | |
|---|---|---|---|---|---|---|
| | Overall | | | Nonsmokers | | |
| | *Percentage (95% CI)* | | *Number in thousands* | *Percentage (95% CI)* | | *Number in thousands* |
| **Overall** | 13.8 | (12.0, 16.0) | 1 636.0 | 8.5 | (6.9, 10.4) | 779.1 |
| *Gender* | | | | | | |
| Male | 16.7 | (14.4, 19.3) | 913.1 | 6.5 | (4.7, 8.8) | 203.9 |
| Female | 11.4 | (9.3, 13.8) | 722.9 | 9.5 | (7.5, 11.9) | 575.2 |
| *Age (years)* | | | | | | |
| 15-24 | 11.0 | (8.3, 14.4) | 291.3 | 8.3 | (5.9, 11.6) | 198.2 |
| 25-44 | 15.6 | (13.2, 18.2) | 750.9 | 9.2 | (7.3, 11.6) | 316.0 |
| 45-64 | 14.4 | (11.6, 17.7) | 470.9 | 8.0 | (5.8, 11.0) | 201.0 |
| 65+ | 11.6 | (8.1, 16.2) | 122.8 | 7.0 | (4.3, 11.2) | 63.9 |
| *Residence* | | | | | | |
| Urban | 15.5 | (13.0, 18.5) | 1 068.1 | 8.6 | (6.5, 11.4) | 444.4 |
| Rural | 11.5 | (9.0, 14.6) | 568.0 | 8.2 | (6.1, 11.0) | 334.7 |
| *Education level*[2] | | | | | | |
| Primary or less | 14.1 | (10.3, 19.2) | 77.1 | 7.4 | (4.6, 11.6) | 30.4 |
| Secondary general | 15.6 | (12.6, 19.2) | 329.8 | 9.1 | (6.7, 12.3) | 147.5 |
| Secondary technical | 17.2 | (13.9, 21.0) | 482.4 | 9.4 | (6.7, 13.0) | 186.5 |
| College or above | 12.1 | (9.7, 15.0) | 444.1 | 7.5 | (5.3, 10.6) | 212.3 |

[1] Adults living where smoking occurred inside the home daily, weekly, or monthly.

[2] Education level is reported only for persons aged 25+ years.

## 6.3. Exposure to Tobacco Smoke in Public Places

**Table 6.3** provides a variety of findings on exposure to tobacco smoke among adults visiting public places in the last 30 days. Approximately 1 in 10 (9.9%) adults who had visited a government building in this period had been exposed to secondhand smoke there; this proportion was not statistically different by gender, age, residence, or education.

Among nonsmokers who had recently visited government buildings, the overall percentage of exposure was 8.4%, with no significant difference by gender (9.2% for men and 8.0% for women).For private workplaces the overall estimate for exposure, at 17.2%, was higher than that for government buildings. At private workplaces, exposure for men (21.2%) was well above that for women (13.4%). Among nonsmokers who had visited private workplaces in the past 30 days, 14.8% were exposed to secondhand smoke, with the difference by gender (18.3% formales, 13.0% for females) not significant.

For healthcare facilities, the overall estimate for exposure to tobacco smoke was 9.7%, 11.3% for men and 8.8% for women. No significant differences were found for any of the demographic characteristics. For nonsmokers, the rate of exposure in healthcare facilities, 9.2%, was similar to the overall rate for adults. Also for the nonsmoking group, only in the case of age (15.5% for those 15-24 vs. 4.5% for those 65+) was statistical significance approached for the difference in exposure rates.

As for adults who had recently visited schools, the overall prevalence of exposure was quite low, 7.8%. By age of the visitor, this rate ranged from 19.1% for those aged 15-24 to just 3.1% for those 45-64. For nonsmokers, the exposure rate at schools was 8.2%, very similar to the overall rate. For colleges/universities, the overall rate of exposure was a disappointing 24.1%, with no significant differences by gender or residence (one estimate for age and two for education were suppressed because of insufficient numbers). For nonsmokers who had visited colleges/universities the rate was 23.9%.

The analysis also included restaurants, bars/nightclubs, cafés/cafeterias, and public transportation, and here the results were often disquieting. For example, the overall estimate for recent exposure in restaurants, 27.6%, was quite high, with essentially one-third (32.8%) of recent male visitors to these establishments being exposed. These estimates paled, however, in comparison to bars/nightclubs, where the overall estimate was 70.4%. Sub-analyses by demographic characteristics, both overall and among nonsmokers, yielded no significant differences. Interestingly, the estimate for nonsmokers of 68.0% was similar to the overall rate for bars/nightclubs.

The overall rate of exposure was 29.7% among visitors to cafes or cafeterias, with no significant difference between men (31.9%) and women (27.2%). For nonsmokers, the estimate was 28.3%. Among adult visitors to cafes or cafeterias overall, a significant difference was seen by education level, with those at the highest level (college or above) having a significantly lower rate of exposure than those with a secondary general education (24.3% vs. 44.3%). Within the nonsmoking group, the same significant difference was found, 23.7% for the highest-educated vs. 49.0% for secondary general.

Regarding public transport, almost a fifth of adults (18.1%) who had used this type of transportation in the last 30 days had been exposed to secondhand smoke (19.4% of men and17.2% of women). By age, the estimates ranged from 16.2% in the 25-44 group to 22.0% for the youngest group (15-24). Among nonsmokers in general the estimate was 17.4%, and, as was the case with adults considered overall, no significant differences were found within any of the analyses by demographic characteristics.

Overall, the analysis found that 33.0% of Kazakhstan adults (37.5% of men and 29.1% of women) had been exposed to tobacco smoke in the last 30 days in one or more of the nine kinds of places reviewed in **Table 6.3**. For nonsmokers the estimate was similar, 30.8%.

**Table 6.3: Percentage of adults aged ≥15 years who visited various public places in the past 30 days and were exposed to tobacco smoke by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic Characteristics | Adults Exposed to Tobacco Smoke[1] in… | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Government buildings | | Private workplaces | | Health care facilities | | Schools | | College/Universities | |
| | *Percentage (95% CI)* | | | | | | | | | |
| **Overall** | 9,9 | (7.7, 12.7) | 17,2 | (14.1, 20.9) | 9,7 | (6.9, 13.5) | 7,8 | (5.1, 11.8) | 24,1 | (18.3, 31.1) |
| *Gender* | | | | | | | | | | |
| Male | 12,5 | (9.3, 16.7) | 21,2 | (17.2, 25.8) | 11,3 | (8.0, 15.6) | 9,6 | (6.1, 14.8) | 26,0 | (19.1, 34.4) |
| Female | 7,8 | (5.7, 10.5) | 13,4 | (10.4, 17.1) | 8,8 | (5.7, 13.2) | 7,0 | (4.2, 11.2) | 22,3 | (14.8, 32.1) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 11,2 | (7.9, 15.6) | 20,8 | (14.9, 28.4) | 15,0 | (8.2, 25.9) | 19,1 | (11.5, 30.0) | 27,6 | (20.1, 36.7) |
| 25-44 | 10,0 | (7.5, 13.2) | 17,5 | (13.9, 21.7) | 10,5 | (7.2, 15.0) | 5,2 | (3.1, 8.4) | 19,3 | (12.0, 29.6) |
| 45-64 | 9,5 | (6.3, 14.1) | 16,0 | (11.6, 21.8) | 7,0 | (4.2, 11.3) | 3,1 | (1.4, 6.4) | 8,8 | (3.4, 20.8) |
| 65+ | 6,8 | (3.3, 13.4) | 6,0 | (2.3, 15.0) | 5,7 | (3.1, 10.1) | 5,0 | (1.1, 20.5) | * | |
| *Residence* | | | | | | | | | | |
| Urban | 10,1 | (7.3, 13.8) | 17,0 | (13.3, 21.5) | 7,5 | (5.1, 10.9) | 5,8 | (3.7, 9.1) | 23,3 | (17.2, 30.6) |
| Rural | 9,7 | (6.3, 14.4) | 17,7 | (12.5, 24.4) | 13,1 | (7.5, 21.9) | 9,9 | (5.3, 17.5) | 25,5 | (14.7, 40.5) |
| *Education Level*[3] | | | | | | | | | | |
| Primary or less | 11,4 | (4.6, 25.3) | 22,5 | (9.8, 43.7) | 12,0 | (5.0, 26.1) | 0,0 | | * | |
| Secondary general | 12,2 | (6.9, 20.9) | 14,1 | (8.6, 22.5) | 4,9 | (2.5, 9.4) | 1,7 | (0.6, 5.1) | * | |
| Secondary technical | 8,1 | (5.6, 11.6) | 16,5 | (12.3, 21.7) | 10,3 | (6.4, 16.0) | 5,6 | (3.1, 9.9) | 7,7 | (3.1, 18.2) |
| College or above | 9,5 | (6.9, 13.1) | 16,8 | (13.1, 21.3) | 8,6 | (5.9, 12.3) | 4,9 | (2.7, 8.9) | 17,4 | (10.0, 28.5) |

[1] Among those that visited the place in the past 30 days.
[2] Percent exposed to tobacco smoke indoors among all respondents who visited at least one of these places in the last 30 days.
[3] Education level is reported only among respondents 25+ years old. * Indicates estimate based on less than 25 unweighted cases and has been supp

**Table 6.3(cont.): Percentage of adults ≥15 years old who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic Characteristics | Adults Exposed to Tobacco Smoke[1] in… | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Government buildings | | Private workplaces | | Health care facilities | | Schools | | College/Universities | |
| | *Percentage (95% CI)* | | | | | | | | | |
| **Non-smokers** | 8,4 | (6.2, 11.2) | 14,8 | (11.8, 18.5) | 9,2 | (6.3, 13.2) | 8,2 | (5.3, 12.5) | 23,9 | (17.9, 31.2) |
| *Gender* | | | | | | | | | | |
| Male | 9,2 | (6.0, 13.8) | 18,3 | (13.6, 24.3) | 10,5 | (6.8, 15.8) | 11,5 | (7.2, 18.0) | 25,7 | (18.0, 35.3) |
| Female | 8,0 | (5.9, 10.8) | 13,0 | (10.1, 16.6) | 8,8 | (5.7, 13.3) | 7,1 | (4.2, 11.6) | 22,6 | (14.9, 32.7) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 8,5 | (5.3, 13.4) | 18,8 | (12.8, 26.9) | 15,5 | (8.3, 27.2) | 18,1 | (10.7, 29.0) | 26,9 | (19.2, 36.3) |
| 25-44 | 8,7 | (6.2, 12.0) | 14,2 | (11.0, 18.3) | 9,5 | (6.2, 14.2) | 5,4 | (3.1, 9.3) | 20,3 | (11.8, 32.8) |
| 45-64 | 8,1 | (4.9, 13.0) | 13,9 | (9.4, 20.0) | 6,7 | (4.1, 10.7) | 3,6 | (1.7, 7.5) | 9,6 | (3.8, 22.2) |
| 65+ | 6,9 | (3.0, 15.2) | 7,0 | (2.6, 17.3) | 4,5 | (2.4, 8.3) | 1,2 | (0.2, 8.3) | * | |
| *Residence* | | | | | | | | | | |
| Urban | 8,1 | (5.4, 12.1) | 14,2 | (10.7, 18.6) | 6,8 | (4.6, 10.0) | 5,8 | (3.6, 9.2) | 22,7 | (17.3, 29.3) |
| Rural | 8,8 | (5.8, 13.1) | 16,0 | (10.8, 23.2) | 12,7 | (6.9, 22.1) | 10,2 | (5.5, 18.2) | 25,7 | (14.4, 41.5) |
| *Education Level*[3] | | | | | | | | | | |
| Primary or less | 8,0 | (2.0, 27.3) | 14,4 | (5.0, 35.0) | 5,0 | (1.9, 12.5) | * | | * | |
| Secondary general | 11,5 | (5.7, 22.0) | 13,3 | (7.4, 22.7) | 5,5 | (2.6, 11.3) | 2,2 | (0.7, 6.5) | * | |
| Secondary technical | 5,0 | (2.9, 8.5) | 11,4 | (7.8, 16.4) | 9,2 | (5.6, 14.9) | 4,7 | (2.1, 10.3) | 6,0 | (1.7, 19.1) |
| College or above | 9,1 | (6.4, 12.9) | 15,2 | (11.4, 19.9) | 8,0 | (5.2, 12.0) | 5,6 | (3.1, 10.1) | 17,5 | (9.6, 29.8) |

[1] Among those that visited the place in the past 30 days.

[2] Percent exposed to tobacco smoke indoors among all respondents who visited at least one of these places in the last 30 days.

[3] Education level is reported only among respondents 25+ years old.

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

**Table 6.3 (cont.): Percentage of adults ≥15 years old who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic Characteristics | Adults Exposed to Tobacco Smoke[1] in… | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Restaurants | | Bars/night clubs | | Cafes/Cafeterias | | Public transportation | | Any of These Places[2] | |
| | *Percentage (95% CI)* | | | | | | | | | |
| **Overall** | 27,6 | (23.1, 32.6) | 70,4 | (64.0, 76.0) | 29,7 | (25.2, 34.6) | 18,1 | (15.2, 21.4) | 33,0 | (29.6, 36.6) |
| *Gender* | | | | | | | | | | |
| Male | 32,8 | (26.9, 39.4) | 70,1 | (62.4, 76.8) | 31,9 | (26.2, 38.2) | 19,4 | (15.6, 24.0) | 37,5 | (33.4, 41.9) |
| Female | 22,2 | (17.8, 27.4) | 70,9 | (62.4, 78.1) | 27,2 | (22.7, 32.2) | 17,2 | (14.0, 20.9) | 29,1 | (25.4, 33.2) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 26,3 | (19.2, 34.9) | 72,2 | (64.5, 78.8) | 31,5 | (24.6, 39.3) | 22,0 | (16.6, 28.5) | 43,6 | (37.6, 49.8) |
| 25-44 | 30,7 | (25.0, 37.0) | 71,6 | (61.7, 79.8) | 30,0 | (25.4, 35.2) | 16,2 | (13.0, 19.9) | 34,0 | (30.1, 38.1) |
| 45-64 | 24,1 | (19.1, 30.0) | * | | 26,2 | (19.5, 34.3) | 16,3 | (12.5, 20.9) | 25,6 | (21.8, 29.9) |
| 65+ | 21,6 | (10.9, 38.5) | * | | * | | 19,0 | (13.4, 26.1) | 19,7 | (15.4, 24.9) |
| *Residence* | | | | | | | | | | |
| Urban | 22,8 | (18.3, 28.1) | 71,9 | (64.7, 78.1) | 28,5 | (23.5, 34.1) | 19,6 | (16.4, 23.2) | 34,2 | (30.3, 38.3) |
| Rural | 35,0 | (26.5, 44.7) | 64,6 | (50.3, 76.7) | 32,5 | (23.7, 42.8) | 15,1 | (10.0, 22.2) | 31,4 | (25.4, 38.1) |
| *Education Level*[3] | | | | | | | | | | |
| Primary or less | * | | * | | * | | 13,3 | (7.0, 23.7) | 22,8 | (15.2, 32.6) |
| Secondary general | 38,6 | (27.2, 51.5) | * | | 44,3 | (31.2, 58.3) | 15,4 | (10.8, 21.4) | 28,2 | (21.9, 35.4) |
| Secondary technical | 26,2 | (18.6, 35.4) | 60,2 | (41.0, 76.7) | 30,2 | (24.2, 37.0) | 15,6 | (12.2, 19.7) | 26,3 | (22.1, 31.1) |
| College or above | 25,3 | (21.2, 30.0) | 68,2 | (56.1, 78.2) | 24,3 | (20.4, 28.7) | 18,2 | (14.6, 22.3) | 33,5 | (29.8, 37.4) |

[1] Among those that visited the place in the past 30 days.

[2] Percent exposed to tobacco smoke indoors among all respondents who visited at least one of these places in the last 30 days.

[3] Education level is reported only among respondents 25+ years old.

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

**Table 6.3 (cont.): Percentage of adults ≥15 years old who visited various public places in the past 30 days and were exposed to tobacco smoke, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic Characteristics | Adults Exposed to Tobacco Smoke[1] in… | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Restaurants | | Bars/night clubs | | Cafes/Cafeterias | | Public transportation | | Any of These Places[2] | |
| | *Percentage (95% CI)* | | | | | | | | | |
| **Non-smokers** | 25,6 | (21.0, 30.8) | 68,0 | (61.0, 74.3) | 28,3 | (23.5, 33.6) | 17,4 | (14.3, 20.9) | 30,8 | (27.2, 34.7) |
| *Gender* | | | | | | | | | | |
| Male | 31,9 | (24.8, 39.9) | 65,2 | (55.0, 74.2) | 29,9 | (22.9, 37.9) | 18,4 | (13.5, 24.6) | 35,4 | (30.5, 40.6) |
| Female | 21,9 | (17.3, 27.2) | 70,9 | (62.1, 78.3) | 27,1 | (22.5, 32.4) | 16,9 | (13.6, 20.8) | 28,5 | (24.6, 32.7) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 26,6 | (18.5, 36.6) | 69,7 | (61.7, 76.7) | 29,7 | (22.5, 38.1) | 21,5 | (15.8, 28.4) | 41,5 | (35.1, 48.2) |
| 25-44 | 29,5 | (23.7, 36.0) | 70,0 | (54.8, 81.8) | 30,1 | (25.0, 35.8) | 14,3 | (11.0, 18.5) | 30,4 | (26.1, 35.0) |
| 45-64 | 19,3 | (14.3, 25.6) | * | | 21,6 | (14.4, 31.0) | 15,9 | (11.9, 20.8) | 23,9 | (19.7, 28.6) |
| 65+ | 13,6 | (5.1, 31.4) | * | | * | | 19,0 | (12.7, 27.4) | 18,2 | (13.8, 23.7) |
| *Residence* | | | | | | | | | | |
| Urban | 20,1 | (15.0, 26.2) | 68,3 | (60.3, 75.3) | 26,6 | (21.3, 32.6) | 18,7 | (15.4, 22.5) | 31,4 | (27.2, 36.0) |
| Rural | 33,1 | (25.0, 42.3) | 67,2 | (52.0, 79.4) | 31,6 | (22.5, 42.5) | 15,0 | (9.5, 22.8) | 30,1 | (24.0, 36.9) |
| *Education Level*[3] | | | | | | | | | | |
| Primary or less | * | | * | | * | | 16,6 | (8.4, 30.1) | 18,3 | (11.5, 27.9) |
| Secondary general | 35,5 | (23.7, 49.3) | * | | 49,0 | (33.9, 64.3) | 13,4 | (9.0, 19.4) | 26,2 | (19.6, 34.0) |
| Secondary technical | 22,1 | (15.0, 31.4) | * | | 24,5 | (17.7, 32.9) | 14,1 | (10.3, 18.9) | 21,9 | (17.8, 26.8) |
| College or above | 22,6 | (18.4, 27.5) | 63,6 | (46.5, 77.8) | 23,7 | (19.5, 28.6) | 17,3 | (13.8, 21.5) | 31,0 | (26.9, 35.3) |

[1] Among those that visited the place in the past 30 days.

[2] Percent exposed to tobacco smoke indoors among all respondents who visited at least one of these places in the last 30 days.

[3] Education level is reported only among respondents 25+ years old.

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

# 7. ECONOMICS

According to both available research and the experience of other countries, increasing the taxes on tobacco products is the most cost-effective measure to reduce tobacco use. In the RK, both retail prices for tobacco products and excise taxes are extremely low in comparison with the prices in the Russian Federation and in many European countries, and they are low compared with the average salary in the republic as well. In the RK, according to the 2014 GATS, the average price of a pack of cigarettes in that year was 221.4 tenge, which is less than 1 euro. By comparison, pricesare 6 to 12 euros for a pack of cigarettes in countries like New Zealand, Mauritius, Norway, Scotland, Iceland, the United Kingdom, and Ireland; and they are from 3 to 6 eurosper pack in Singapore, Australia, France, Israel, Germany, Sweden, Denmark, Finland, Italy, Switzerland, Belgium, the Netherlands, the USA, Cyprus, Austria, and Malta. Prices are 1 to 3 Euros in Portugal, Greece, Spain, Croatia, Hungary, Czech Republic, Slovakia, Estonia, Latvia, and Lithuania; andthey are less than 1 euro in the Russian Federation, Iran, Vietnam, Ukraine, and Belarus.

Calculated as a percentage of gross domestic product (GDP), in the RK the price of 100 packs in 2014 was just 1.0%. In terms of the excise tax, the rate is supposed to rise from 3,000 tenge per 1,000 cigarettes in 2014 to 5,000 tenge per 1,000 cigarettes in 2016 [30].

Countries that are members of the Customs Union (CU), of which Kazakhstan is one, tend to adhere to the principles of international regulation with regard to taxreform. In accordance with agreements between the Ministry of Finance of the RK and the Russian Federation, Kazakhstan set a goal for its excise tax to be 50 euros per 1,000 cigarettes in the year 2020, with possible deviations +/- 20%. Thus, if the excise tax in the Russian Federation is 50 euros per 1,000, in Kazakhstan it may be at the level of 40-45 euros per 1,000, which will affect the retail price of tobacco products and thus their availability to the population. In the RK, according to the Ministry of Finance, in 2014 the excise taxes on alcohol and tobacco products were only 1.42%, or 33.3 billion tenge, out of the total 2337.0 billion budget revenues. In modern countries, excise duties are an important source of income for the state budget, generally being 3-5% of total revenues.

***Key findings:***

- *A strong majority (85%) of current smokers of manufactured cigarettes bought them in stores.*
- *On average, current cigarette smokers spent 4,244.5 tenge per month on manufactured cigarettes.*
- *The average amount spent on a pack of 20 manufactured cigarettes was 221.4 tenge.*

## 7.1. Last Brand of Manufactured Cigarettes Purchased

In the survey, current smokers of manufactured cigarettes were asked to report the last brand they had purchased; **Table 7.1** shows the top five brands, which accounted for 61% of all reported brands. Bond was the most prevalence (22.7%), followed by Parliament (12.6%) and Kent (10.7%), with Sovereign (9.6%) and Marlboro (5.7%) fourth and fifth, respectively. Almost one-fourth of men (23.9%) had chosen Bond, well above the percentage of women (11.7%) who chose that brand. In absolute terms, Bond achieved its highest rankings among those with little education (primary or less), at 46.6%, and among rural residents, at 33.9%. Only 8.0% of smokers with a college education or more chose Bond for their last purchase.

Among women, Esse finished first at 16.4%, followed by Bond (11.7%), Kent (9.8%), LD (8.3%), and Glamour (6.6%) (see **Figure 7.1**; only two of these brands are shown in **Table 7.1**).

**Figure 7.1. Top 5 cigarette brands purchased by current female smokers, GATS Kazakhstan, 2014.**

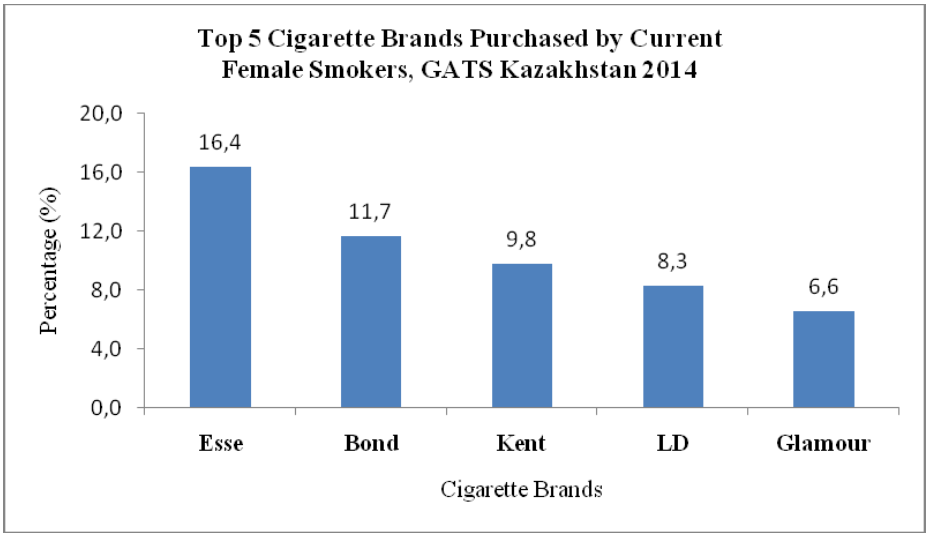


**Table 7.1: Percentages of current adult smokers of manufactured cigarettes, by last brand purchased and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | LastBrand Purchased | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Bond | | Parliament | | Kent | | Sovereign | | Marlboro | |
| | *Percentage (95% CI)* | | | | | | | | | |
| **Overall** | 22.7 | (19.9, 25.8) | 12.6 | (10.6, 15.0) | 10.7 | (8.4, 13.4) | 9.6 | (7.6, 12.1) | 5.7 | (4.2, 7.6) |
| *Gender* | | | | | | | | | | |
| Male | 23.9 | (20.8, 27.2) | 13.4 | (11.2, 16.0) | 10.8 | (8.3, 13.8) | 10.1 | (8.0, 12.8) | 6.2 | (4.6, 8.2) |
| Female | 11.7 | (6.7, 19.7) | 5.3 | (2.2, 12.3) | 9.8 | (5.6, 16.8) | 4.4 | (1.5, 12.6) | 0.8 | (0.2, 3.4) |
| *Age (years)* | | | | | | | | | | |
| 15-24 | 15.9 | (9.4, 25.6) | 25.6 | (15.6, 39.1) | 11.6 | (4.8, 25.4) | 9.4 | (2.9, 26.7) | 7.3 | (3.7, 13.7) |
| 25-44 | 20.4 | (16.9, 24.4) | 12.4 | (9.2, 16.6) | 12.6 | (10.0, 15.8) | 9.1 | (6.8, 12.2) | 6.9 | (4.8, 9.8) |
| 45-64 | 27.6 | (22.5, 33.4) | 9.5 | (6.2, 14.2) | 8.3 | (4.4, 14.9) | 11.5 | (8.1, 15.9) | 3.8 | (2.0, 7.1) |
| 65+ | 30.1 | (19.5, 43.2) | 8.4 | (3.3, 19.9) | 3.7 | (1.0, 13.1) | 4.0 | (0.8, 17.6) | 1.7 | (0.2, 11.1) |
| *Residence* | | | | | | | | | | |
| Urban | 16.4 | (13.1, 20.3) | 15.8 | (13.0, 19.1) | 12.2 | (9.2, 16.1) | 8.8 | (6.2, 12.5) | 5.6 | (3.8, 8.2) |
| Rural | 33.9 | (29.0, 39.2) | 6.9 | (4.6, 10.3) | 7.9 | (5.4, 11.6) | 10.9 | (8.3, 14.3) | 5.8 | (3.7, 8.8) |
| *Education level*[1] | | | | | | | | | | |
| Primary or less | 46.6 | (32.0, 61.8) | 5.6 | (2.0, 15.1) | 5.6 | (1.2, 22.9) | 9.7 | (3.7, 23.2) | 0.0 | |
| Secondary general | 34.6 | (28.1, 41.7) | 5.9 | (3.1, 11.0) | 5.1 | (2.9, 8.9) | 12.8 | (8.6, 18.7) | 1.8 | (0.5, 6.2) |
| Secondary technical | 28.3 | (22.9, 34.3) | 8.5 | (5.6, 12.8) | 8.8 | (5.6, 13.5) | 10.5 | (7.6, 14.3) | 5.4 | (3.4, 8.5) |
| College or above | 8.0 | (5.7, 11.2) | 18.2 | (13.5, 23.9) | 16.6 | (11.7, 22.9) | 6.9 | (4.3, 10.7) | 8.9 | (5.7, 13.5) |

Note: Current adult smokers of manufactured cigarettes includes daily and occasional (less than daily) users. This table shows the top five brands (by last purchase) among all adult smokers of manufactured cigarettes.

[1] Education level is reported only for persons aged 25+ years.

## 7.2. The Source of Last Purchase of Cigarettes

**Table 7.2** presents the percentage distribution of adult smokers of manufactured cigarettes by source of last purchase and selected demographic characteristics. Overall, the most common sources of buying cigarettes were stores (85.2%), street vendors or markets (5.2%), newspaper kiosks (3.8%), and gas stations (3.6%). The percentages for stores were very similar by gender (85.1% for men and 86.3% for women).

**Table 7.2: Percentage distribution of adults aged ≥15 years who smoked manufactured cigarettes, by source of last purchase of cigarettes and selected demographic characteristics – GATS Kazakhstan, 2014.**

| | | | Gender | | | | Age (years) | | | | Residence | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Source** | **Overall** | | **Male** | | **Female** | | **15-24** | | **25+** | | **Urban** | | **Rural** | |
| | *Percentage (95% CI)* | | | | | | | | | | | | | |
| Vending machine | 0.3 | (0.1, 1.0) | 0.3 | (0.1, 1.1) | 0.0 | | 1.0 | (0.1, 6.7) | 0.2 | (0.0, 1.2) | 0.5 | (0.1, 1.6) | 0.0 | |
| Store | 85.2 | (81.9, 87.9) | 85.1 | (81.5, 88.1) | 86.3 | (78.0, 91.8) | 79.3 | (66.9, 88.0) | 85.8 | (82.6, 88.5) | 81.4 | (76.8, 85.2) | 92.0 | (87.7, 94.9) |
| Street vendor or market | 5.2 | (3.7, 7.3) | 5.5 | (3.8, 7.9) | 2.1 | (0.5, 9.2) | 6.6 | (2.0, 19.2) | 5.0 | (3.5, 7.2) | 4.9 | (3.2, 7.5) | 5.6 | (3.1, 9.9) |
| Outside the country | 0.2 | (0.0, 1.1) | 0.2 | (0.0, 1.3) | 0.0 | | 0.0 | | 0.2 | (0.0, 1.3) | 0.2 | (0.0, 1.8) | 0.0 | |
| Kiosk | 3.8 | (2.3, 6.2) | 3.9 | (2.3, 6.4) | 3.3 | (1.1, 9.4) | 8.3 | (3.8, 17.4) | 3.3 | (2.0, 5.4) | 5.9 | (3.6, 9.5) | 0.0 | |
| Internet | 0.0 | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | 0.0 | | 0.0 | |
| Restaurant/bar | 0.7 | (0.4, 1.4) | 0.6 | (0.3, 1.2) | 2.0 | (0.4, 9.4) | 2.5 | (0.6, 9.5) | 0.5 | (0.3, 1.2) | 1.0 | (0.5, 2.0) | 0.3 | (0.1, 1.4) |
| Gas station | 3.6 | (2.4, 5.2) | 3.4 | (2.3, 4.9) | 5.3 | (2.2, 12.4) | 1.9 | (0.4, 7.7) | 3.7 | (2.5, 5.6) | 4.8 | (3.1, 7.2) | 1.4 | (0.6, 3.2) |
| Other | 1.1 | (0.5, 2.1) | 1.1 | (0.5, 2.2) | 0.9 | (0.1, 6.5) | 0.5 | (0.1, 3.3) | 1.1 | (0.6, 2.3) | 1.3 | (0.6, 2.9) | 0.6 | (0.2, 2.2) |
| **Total** | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | |

## 7.3. Average Cigarette Expenditure

In GATS, information was obtained from daily or less than daily smokers of manufactured cigarettes on the amount of money they spent the last time they purchased cigarettes; Table 7.3 shows the average cost of cigarettes per month among these smokers based on the information obtained on their last purchases.

On average, a current smoker spent 4,244.5 tenge per month on manufactured cigarettes, with men spending significantly more money (4,420.4 vs. 2,602.6 tenge, a difference of 1,817.8 tenge). In the other subanalyses, no significant differences were found by age, residence, or education. The average amount spent on 20 manufactured cigarettes was 221.4 tenge, and the cost of 100 manufactured cigarettes equaled 1.0% of per capita GDP.

**Table 7.3: Average cigarette expenditure per month among adult smokers of manufactured cigarettes, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Cigarette expenditure per month (Kazakhstani tenge) | |
|---|---|---|
| | *Average (95% CI)* | |
| **Overall** | 4,244.5 | (3,750.8, 4,738.1) |
| *Gender* | | |
| Male | 4,420.4 | (3,885.2, 4,955.5) |
| Female | 2,602.6 | (2,031.3, 3,173.9) |
| *Age (years)* | | |
| 15-24 | 4,516.8 | (1,402.5, 7,631.1) |
| 25-44 | 4,074.0 | (3,587.5, 4,560.4) |
| 45-64 | 4,462.3 | (3,660.5, 5,264.0) |
| 65+ | 4,154.7 | (3,337.6, 4,971.8) |
| *Residence* | | |
| Urban | 4,253.2 | (3,562.3, 4,944.1) |
| Rural | 4,227.4 | (3,674.7, 4,780.2) |
| *Education level*[1] | | |
| Primary or less | 3,640.7 | (2,736.8, 4,544.6) |
| Secondary general | 3,964.6 | (3,510.9, 4,418.2) |
| Secondary technical | 4,600.9 | (3,871.2, 5,330.7) |
| College or above | 4,097.9 | (3,311.9, 4,883.9) |

[1] Education level is reported only for persons aged 25+ years.

# 8. MEDIA

Having a total ban on advertising, sales promotion, and the sponsorship of tobacco products can significantly reduce tobacco use and protect the public, especially young people, from the marketing ploys of the tobacco industry. For efficiency, the prohibitions should be complete and cover all marketing categories [4].

In the RK the advertising of tobacco and tobacco products is prohibited by law; in addition to direct advertisements, this includes advertising that stimulates demand for and interest in tobacco products as well as the use of elements of the trademark or name of tobacco and tobacco products that directly or indirectly promotes these products.

In accordance with the Government Order of the RK dated November 22, 2011, rules are in force for the display of warnings on tobacco products. These include displays on the pack or packaging of information on the composition of substances that are harmful to health, as well as the display of warnings about the dangers of smoking, which should occupy not less than 40% of each large side of the packs and packages of tobacco products. Since April 2013, all cigarette packs have to carry pictorial images (pictograms) on the dangers of smoking.

This chapter provides information about awareness of antitobacco information in various places, including on cigarette packs, the impact of this information on the population, and information about noticing cigarette marketing in various media and in public places.

***Key findings:***

- *Approximately half (49.5%) of adults had noticed anticigarette information at any location during the last 30 days.*
- *Most (94.8%) current smokers had noticed health warnings on cigarette packs about the dangers of smoking in the last 30 days, and 51.3% of current smokers had thought about quitting smoking because of health warnings on cigarette packs.*
- *Almost all (97.6%) current smokers had noticed pictorial health warnings on cigarette packs in the last 30 days; 58.0% of current smokers had thought about quitting because of the pictorial warnings.*
- *14.0% of adults had noticed cigarette advertising in stores where cigarettes were sold.*
- *Essentially one-fourth (25.7%) of adults had noticed any advertising, sponsorship, or promotion of cigarettes.*

## 8.1. Anticigarette Smoking Information

People can receive information about the dangers of cigarette smoking from a variety of media sources, such as newspapers, magazines, television, radio, billboards, and other places. All subsets of the population should be made aware of information about the dangers of cigarette smoking and secondhand smoke [4].

**Table 8.1** presents information on the percentage of adults aged 15+ who had noticed anticigarette information during the last 30 days in various places (newspapers or magazines, on television or radio, on billboards, somewhere else, in any location).

Overall, about half (49.5%) of adults had noticed anticigarette information during the last 30 days (47.1% of men, 51.7% of women). No significant differences in this measure were found between smokers and nonsmokers (**Table 8.1**) or between people of different age groups (**Figure 8.1.**). More urban than rural residents had seen such information, though not significant (**Table 8.1**, 54.0% vs. 43.7%).

Among all adults (**Table 8.1**), information about the dangers of cigarette smoking was noticed in the last 30 days as follows (in ascending order): radio (7.6%), somewhere else (13.4%), billboards (20.7%), newspapers or magazines (29.9%), and television (33.2%).

**Figure 8.1: Noticed anticigarette information compared with noticed cigarette marketing during the last 30 days at any location among adults aged ≥15 years, by age – GATS Kazakhstan, 2014**

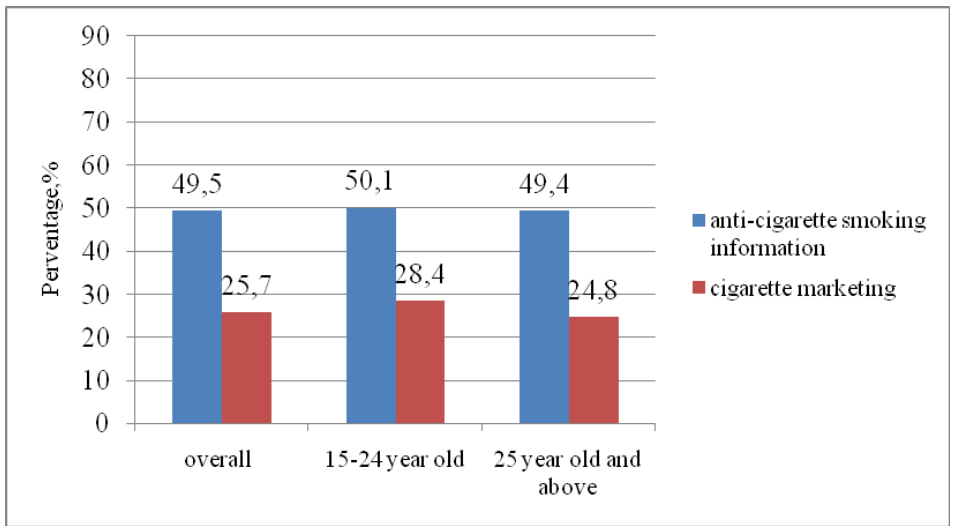


**Table 8.1: Percentage of adults aged ≥15 years who had noticed anticigarette smoking information during the last 30 days in various places, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Place | Overall | | Gender: Male | | Gender: Female | |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| ***Overall*** | | | | | | |
| In newspapers or in magazines | 29.9 | (27.2, 32.8) | 27.5 | (24.2, 31.1) | 32.0 | (29.0, 35.2) |
| On television or the radio | 34.6 | (31.5, 37.9) | 32.7 | (29.4, 36.2) | 36.4 | (32.9, 40.0) |
| On television | 33.2 | (30.0, 36.5) | 31.1 | (27.6, 34.8) | 35.0 | (31.5, 38.7) |
| On the radio | 7.6 | (6.1, 9.3) | 7.3 | (5.8, 9.1) | 7.8 | (6.2, 9.9) |
| On billboards | 20.7 | (17.8, 23.9) | 20.6 | (17.4, 24.1) | 20.8 | (17.7, 24.3) |
| Somewhere else | 13.4 | (10.6, 16.9) | 12.3 | (9.4, 16.0) | 14.4 | (11.3, 18.3) |
| Any location | 49.5 | (45.9, 53.2) | 47.1 | (42.9, 51.3) | 51.7 | (47.9, 55.6) |
| ***Current smokers***[1] | | | | | | |
| In newspapers or in magazines | 25.7 | (21.9, 29.9) | 25.9 | (21.7, 30.5) | 24.3 | (16.0, 35.2) |
| On television or the radio | 29.4 | (25.8, 33.3) | 29.2 | (25.5, 33.3) | 31.2 | (20.9, 43.6) |
| On television | 27.9 | (24.3, 31.9) | 27.7 | (23.9, 31.8) | 30.0 | (20.0, 42.4) |
| On the radio | 7.7 | (5.9, 10.1) | 7.9 | (6.0, 10.4) | 6.0 | (2.2, 15.2) |
| On billboards | 20.8 | (17.2, 25.0) | 20.3 | (16.5, 24.6) | 25.4 | (17.6, 35.2) |
| Somewhere else | 14.1 | (11.0, 18.0) | 13.6 | (10.3, 17.6) | 18.3 | (11.2, 28.6) |
| Any location | 46.4 | (42.0, 50.9) | 45.7 | (40.7, 50.7) | 52.5 | (42.0, 62.8) |
| ***Nonsmokers***[2] | | | | | | |
| In newspapers or in magazines | 31.1 | (28.2, 34.2) | 28.7 | (24.9, 32.8) | 32.4 | (29.3, 35.6) |
| On television or the radio | 36.2 | (32.7, 39.7) | 35.2 | (31.2, 39.5) | 36.6 | (33.0, 40.4) |
| On television | 34.7 | (31.2, 38.3) | 33.6 | (29.5, 38.0) | 35.3 | (31.6, 39.1) |
| On the radio | 7.5 | (5.9, 9.4) | 6.8 | (5.0, 9.1) | 7.9 | (6.2, 10.1) |
| On billboards | 20.6 | (17.5, 24.2) | 20.8 | (17.1, 25.0) | 20.6 | (17.4, 24.2) |
| Somewhere else | 13.3 | (10.2, 17.0) | 11.4 | (8.2, 15.6) | 14.3 | (11.1, 18.2) |
| Any location | 50.4 | (46.4, 54.4) | 48.1 | (43.2, 53.0) | 51.7 | (47.7, 55.7) |

[1] Includes daily and occasional (less than daily) smokers.

[2] Includes both former and never smokers.

**Table 8.1(cont.): Percentage of adults aged ≥15 years who had noticed anticigarette smoking information during the last 30 days in various places, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014**

| | Age (years) | | | | Residence | | | |
|---|---|---|---|---|---|---|---|---|
| **Place** | **15-24** | | **25+** | | **Urban** | | **Rural** | |
| | | | | *Percentage (95% CI)* | | | | |
| ***Overall*** | | | | | | | | |
| In newspapers or in magazines | 29.3 | (25.4, 33.5) | 30.1 | (27.2, 33.1) | 32.2 | (28.8, 35.8) | 26.9 | (22.6, 31.8) |
| On television or the radio | 33.5 | (29.0, 38.4) | 35.0 | (31.7, 38.4) | 37.1 | (33.6, 40.7) | 31.4 | (26.1, 37.3) |
| On television | 32.3 | (27.6, 37.3) | 33.4 | (30.1, 36.9) | 35.4 | (31.6, 39.4) | 30.2 | (25.0, 36.1) |
| On the radio | 8.3 | (5.9, 11.4) | 7.3 | (6.0, 8.9) | 9.6 | (7.7, 11.9) | 4.9 | (3.0, 7.9) |
| On billboards | 24.0 | (19.7, 29.0) | 19.7 | (16.8, 22.9) | 22.1 | (18.6, 26.1) | 18.8 | (14.2, 24.5) |
| Somewhere else | 15.2 | (11.6, 19.7) | 12.9 | (10.0, 16.4) | 15.3 | (11.6, 19.8) | 11.1 | (7.0, 17.1) |
| Any location | 50.1 | (44.8, 55.5) | 49.4 | (45.6, 53.1) | 54.0 | (49.9, 58.0) | 43.7 | (37.4, 50.3) |
| ***Current smokers***[1] | | | | | | | | |
| In newspapers or in magazines | 23.5 | (15.3, 34.3) | 26.0 | (21.9, 30.5) | 28.1 | (23.1, 33.6) | 21.4 | (16.3, 27.7) |
| On television or the radio | 28.8 | (19.6, 40.2) | 29.5 | (25.7, 33.7) | 32.3 | (27.9, 37.1) | 24.1 | (18.4, 30.9) |
| On television | 27.1 | (18.2, 38.2) | 28.0 | (24.2, 32.2) | 30.3 | (25.8, 35.3) | 23.4 | (17.8, 30.2) |
| On the radio | 12.6 | (6.0, 24.5) | 7.1 | (5.5, 9.3) | 9.4 | (7.0, 12.6) | 4.5 | (2.3, 8.9) |
| On billboards | 29.3 | (18.7, 42.7) | 19.8 | (16.1, 24.1) | 24.9 | (20.0, 30.6) | 13.3 | (9.0, 19.0) |
| Somewhere else | 18.5 | (11.2, 29.1) | 13.6 | (10.4, 17.5) | 16.1 | (12.0, 21.2) | 10.5 | (6.2, 17.1) |
| Any location | 54.1 | (42.8, 64.9) | 45.5 | (40.8, 50.4) | 51.6 | (46.3, 57.0) | 36.8 | (29.6, 44.7) |
| ***Nonsmokers***[2] | | | | | | | | |
| In newspapers or in magazines | 29.9 | (25.8, 34.4) | 31.5 | (28.5, 34.8) | 33.6 | (29.9, 37.5) | 28.1 | (23.6, 33.2) |
| On television or the radio | 34.1 | (29.1, 39.4) | 36.9 | (33.4, 40.6) | 38.8 | (34.9, 42.8) | 33.0 | (27.4, 39.3) |
| On television | 32.9 | (27.8, 38.4) | 35.3 | (31.8, 39.1) | 37.2 | (33.0, 41.5) | 31.7 | (26.2, 37.9) |
| On the radio | 7.8 | (5.4, 11.1) | 7.4 | (6.0, 9.1) | 9.7 | (7.5, 12.4) | 4.9 | (3.0, 8.0) |
| On billboards | 23.4 | (18.9, 28.6) | 19.6 | (16.5, 23.2) | 21.1 | (17.4, 25.4) | 20.1 | (15.1, 26.2) |
| Somewhere else | 14.8 | (11.0, 19.7) | 12.7 | (9.6, 16.6) | 15.0 | (11.0, 20.1) | 11.2 | (7.0, 17.4) |
| Any location | 49.7 | (43.8, 55.5) | 50.7 | (46.7, 54.7) | 54.8 | (50.1, 59.4) | 45.3 | (38.7, 52.1) |

[1] Includes daily and occasional (less than daily) smokers.

[2] Includes both former and never smokers.

## 8.2. Impact of Health Warnings on the Cigarette Package

**Table 8.2** deals with the percentages of current adult smokers who had noticed health warnings on cigarette packages in the last 30 days, and who had considered quitting because of the warning label; the table also reports percentages for noticing pictorial health warnings specifically and for thinking about quitting because of the pictorial health label. Results are given both overall and by gender, age, residence, and education.The vast majority (94.8%) of current smokers had noticed health warnings about the hazards of smoking on cigarette packages in the last 30 days, and 51.3% had thought about quitting because of the warning labels. The estimates were slightly higher for pictorial health warnings specifically, which were noticed by 97.6% of current smokers in the last 30 days, with 58.0% of smokers thinking about quitting because of these warnings. Similar results were obtained for both male and female smokers for the warnings.

While there were no significant differences between the age groups in noticing the health warnings, a significantly lower percentage of smokers aged ≥65 years (only 33.3% and 33.9%, respectively) had thought about quitting because of the health warnings than had any other age group.

The table shows there were no significant differences between rural and urban residents in noticing health warnings (94.4%, urban; 95.7%, rural) or in thinking about quitting because of the labels (50.7%, urban; 52.5%, rural).

**Table 8.2: Percentages of current smokers aged ≥15 years who noticed health warnings (traditional, pictorial) on cigarette packages and considered quitting because of the warning labels during the last 30 days, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Current Smokers[1] Who… | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Noticed health warnings on cigarette package[2] | | Thought about quitting because ofwarning label[2] | | Noticed *pictorial* health warnings on cigarette package[2] | | Thought about quitting because of *pictorial* warning label[2] | |
| | *Percentage (95% CI)* | | | | | | | |
| **Overall** | 94.8 | (92.9, 96.3) | 51.3 | (47.5, 55.1) | 97.6 | (96.4, 98.4) | 58.0 | (54.0, 61.9) |
| *Gender* | | | | | | | | |
| Male | 95.1 | (93.1, 96.5) | 50.8 | (46.8, 54.8) | 97.9 | (96.7, 98.7) | 57.9 | (53.6, 62.1) |
| Female | 92.8 | (85.7, 96.6) | 55.5 | (45.1, 65.4) | 94.9 | (88.7, 97.8) | 58.5 | (48.9, 67.4) |
| *Age (years)* | | | | | | | | |
| 15-24 | 92.5 | (84.4, 96.6) | 50.7 | (39.2, 62.1) | 98.9 | (92.4, 99.8) | 55.1 | (42.9, 66.7) |
| 25-44 | 95.3 | (93.0, 96.8) | 50.2 | (45.4, 54.9) | 97.5 | (95.6, 98.6) | 58.3 | (53.6, 62.9) |
| 45-64 | 95.2 | (90.6, 97.6) | 56.9 | (49.6, 63.9) | 98.0 | (95.7, 99.0) | 62.9 | (55.9, 69.4) |
| 65+ | 92.9 | (84.2, 97.0) | 33.3 | (20.1, 49.8) | 94.5 | (83.0, 98.4) | 33.9 | (20.6, 50.3) |
| *Residence* | | | | | | | | |
| Urban | 94.4 | (91.6, 96.3) | 50.7 | (45.8, 55.6) | 97.7 | (96.2, 98.6) | 56.9 | (51.7, 61.9) |
| Rural | 95.7 | (92.8, 97.4) | 52.5 | (46.4, 58.4) | 97.5 | (94.9, 98.8) | 60.1 | (53.9, 66.0) |
| *Education level*[3] | | | | | | | | |
| Primary or less | 91.6 | (82.2, 96.3) | 47.5 | (34.2, 61.1) | 98.6 | (91.2, 99.8) | 58.3 | (43.0, 72.1) |
| Secondary general | 95.3 | (89.9, 97.9) | 54.8 | (46.6, 62.7) | 97.9 | (93.4, 99.4) | 61.8 | (53.9, 69.1) |
| Secondary technical | 95.6 | (91.9, 97.6) | 47.2 | (41.0, 53.6) | 97.9 | (95.5, 99.1) | 52.6 | (46.5, 58.7) |
| College or above | 95.1 | (92.6, 96.8) | 54.7 | (47.1, 62.0) | 96.5 | (93.8, 98.1) | 62.6 | (56.0, 68.8) |

[1] Includes daily and occasional (less than daily) smokers.

[2] During the last 30 days.

[3] Education level is reported only for persons aged 25+ years.

## 8.3. Cigarette Marketing

The marketing of cigarettes concerns the promotion of cigarettes through several means, often by using advertisements in the media or in public places and through sponsorships, such as the sponsorship of sporting events; it also involves giving free samples, establishing sale prices, giving out coupons, offering free gifts / special offers to persons buying cigarettes, imprinting clothing/other items with a brand name or the logo of cigarettes, and promoting cigarettes through the mail.

**Table 8.3** shows the percentage of adults aged ≥15 years who had noticed (in the last 30 days) cigarette marketing through advertising, sponsorship, or the sales promotion of cigarettes. Overall, despite the RK law prohibiting the advertising of cigarettes, 25.7% of adults (26.2% of men and 25.2% of women) had noticed such marketing. In the age groups 15-24 and 25+years (**Figure 8.1** and **Table 8.3**), 28.4% and 24.8% of adults, respectively, had noticed such marketing. Estimates by residence were 28.0% for urban dwellers and 22.6% for those in rural areas (**Table 8.3**).

**Table 8.3** also reveals that essentially 1 in 7 adults (14.0%) had in the last 30 days noticed advertisements for cigarettes in stores; lower estimates were found for noticing such advertisements on the Internet (7.0% overall, but 11.3% for those aged 15-24), on public vehicles or stations (4.5%), on billboards (2.8%), on television (2.6%), in newspapers or magazines (2.6%), in cinemas (2.2%), and on radio (0.7%); 2.0% of adults had notice advertisements somewhere else.

The marketing of cigarettes through the sponsorship of sporting events was noticed by1.3% of adults, and estimates for noticing cigarette promotions were also low:2.2% for clothing / other items with the brand name or logo of cigarettes, 1.9% for gifts / special offers (discounts) when purchasing cigarettes, 1.4% for free samples, 0.5% for both coupons and the advertising of cigarettes by mail, and 0.3% for sale prices.

Among current smokers overall, exposure appeared to be slightly higher, as 29.1% (28.9% of men, 31.2% of women) had noticed any cigarette marketing through advertising, sponsorship, or sales promotion in the last 30 days (**Table 8.4**). The prevalence was higher for those aged 15-24 (39.7%) than for those 25 or over (27.9%), albeit the difference was not significant. By area, the estimates for smokers were 30.8% for those living in urban areas and 26.1% for those living in rural areas.

As expected, the highest estimate for the noticing of advertisements by smokers was for stores (15.4%). The estimate for the Internet was 8.3%, with findings here of 17.2% for the 15-24 group and 7.3% for those aged 25+.

**Table 8.5** displays the percentage of nonsmokers who had noticed cigarette marketing in the last 30 days in various places; essentially one-fourth (24.6%) of this group had noticed cigarette marketing through advertising, sponsorship, or the sales promotion of cigarettes.

**Table 8.3: Percentage of adults aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | | | Gender | | | |
|---|---|---|---|---|---|---|
| **Place** | **Overall** | | **Male** | | **Female** | |
| | | | *Percentage (95% CI)* | | | |
| *Noticed advertisements* | | | | | | |
| In stores where cigarettes are sold | 14.0 | (11.4, 17.1) | 14.6 | (11.6, 18.3) | 13.4 | (10.8, 16.6) |
| On television | 2.6 | (1.9, 3.5) | 2.3 | (1.4, 3.8) | 2.7 | (2.0, 3.8) |
| On the radio | 0.7 | (0.5, 1.1) | 0.7 | (0.3, 1.4) | 0.8 | (0.5, 1.3) |
| On billboards | 2.8 | (2.0, 3.9) | 2.8 | (1.8, 4.3) | 2.8 | (2.0, 4.0) |
| In newspapers or magazines | 2.6 | (1.8, 3.5) | 2.6 | (1.6, 4.1) | 2.5 | (1.8, 3.6) |
| In cinemas | 2.2 | (1.6, 2.9) | 2.6 | (1.9, 3.7) | 1.8 | (1.2, 2.6) |
| On the Internet | 7.0 | (5.7, 8.7) | 7.4 | (5.8, 9.3) | 6.7 | (5.1, 8.7) |
| On public transportation vehicles or stations | 4.5 | (3.1, 6.4) | 5.0 | (3.5, 7.1) | 4.1 | (2.6, 6.2) |
| Somewhere else | 2.0 | (1.1, 3.6) | 2.3 | (1.4, 3.7) | 1.7 | (0.8, 3.8) |
| Noticed sports sponsorship | 1.3 | (0.8, 1.9) | 1.3 | (0.7, 2.3) | 1.2 | (0.8, 2.0) |
| *Noticed cigarette promotions* | | | | | | |
| Free samples | 1.4 | (1.0, 2.0) | 1.5 | (1.0, 2.3) | 1.4 | (0.9, 2.1) |
| Sale prices | 0.3 | (0.2, 0.5) | 0.3 | (0.2, 0.6) | 0.3 | (0.1, 0.6) |
| Coupons | 0.5 | (0.3, 0.8) | 0.6 | (0.3, 1.2) | 0.5 | (0.2, 1.0) |
| Free gifts/discounts on other products | 1.9 | (1.4, 2.7) | 2.6 | (1.7, 3.8) | 1.4 | (0.9, 2.1) |
| Clothing/item with brand name or logo | 2.2 | (1.6, 3.1) | 2.9 | (2.0, 4.4) | 1.6 | (1.0, 2.5) |
| Mail promoting cigarettes | 0.5 | (0.3, 0.8) | 0.5 | (0.3, 1.2) | 0.4 | (0.2, 0.7) |
| **Noticed any advertisement, sponsorship, or promotion** | 25.7 | (22.5, 29.1) | 26.2 | (22.5, 30.4) | 25.2 | (21.7, 28.9) |

**Table 8.3 (cont.): Percentage of adults aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | Age (years) | | | | Residence | | | |
|---|---|---|---|---|---|---|---|---|
| **Place** | **15-24** | | **25+** | | **Urban** | | **Rural** | |
| | *Percentage (95% CI)* | | | | | | | |
| *Noticed advertisements* | | | | | | | | |
| In stores where cigarettes are sold | 13.0 | (9.5, 17.6) | 14.3 | (11.7, 17.3) | 13.6 | (10.7, 17.1) | 14.5 | (10.2, 20.3) |
| On television | 2.6 | (1.3, 5.0) | 2.6 | (1.9, 3.4) | 2.6 | (1.8, 3.8) | 2.4 | (1.4, 4.2) |
| On the radio | 0.7 | (0.3, 1.8) | 0.8 | (0.5, 1.2) | 0.8 | (0.5, 1.3) | 0.6 | (0.3, 1.4) |
| On billboards | 3.3 | (1.9, 5.8) | 2.7 | (1.9, 3.7) | 3.2 | (2.0, 5.0) | 2.3 | (1.4, 3.8) |
| In newspapers or magazines | 3.3 | (2.0, 5.4) | 2.3 | (1.6, 3.3) | 2.8 | (1.8, 4.2) | 2.2 | (1.3, 3.9) |
| In cinemas | 2.5 | (1.5, 4.0) | 2.1 | (1.5, 2.9) | 3.1 | (2.3, 4.1) | 1.0 | (0.5, 2.3) |
| On the internet | 11.3 | (8.5, 14.9) | 5.8 | (4.6, 7.2) | 9.4 | (7.3, 11.9) | 4.0 | (2.6, 6.0) |
| On public transportation vehicles or stations | 5.0 | (3.1, 8.0) | 4.4 | (3.1, 6.2) | 4.5 | (2.7, 7.2) | 4.6 | (2.7, 7.7) |
| Somewhere else | 2.1 | (0.9, 4.9) | 2.0 | (1.1, 3.5) | 2.4 | (1.2, 4.8) | 1.5 | (0.5, 4.2) |
| Noticed sports sponsorship | 2.4 | (1.3, 4.4) | 0.9 | (0.6, 1.4) | 1.7 | (1.1, 2.5) | 0.7 | (0.2, 2.4) |
| *Noticed cigarette promotions* | | | | | | | | |
| Free samples | 1.9 | (1.1, 3.4) | 1.3 | (0.9, 1.9) | 2.2 | (1.6, 3.2) | 0.4 | (0.1, 1.2) |
| Sale prices | 0.3 | (0.1, 0.9) | 0.3 | (0.2, 0.6) | 0.4 | (0.2, 0.9) | 0.1 | (0.1, 0.3) |
| Coupons | 1.0 | (0.5, 2.2) | 0.4 | (0.2, 0.7) | 0.7 | (0.4, 1.2) | 0.3 | (0.1, 0.7) |
| Free gifts/discounts on other products | 2.0 | (1.2, 3.4) | 1.9 | (1.3, 2.7) | 2.9 | (2.0, 4.2) | 0.7 | (0.2, 2.0) |
| Clothing/item with brand name or logo | 2.0 | (1.1, 3.6) | 2.3 | (1.6, 3.2) | 2.5 | (1.7, 3.7) | 1.8 | (1.0, 3.3) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Mail promoting cigarettes | 0.5 | (0.2, 1.2) | 0.4 | (0.2, 0.8) | 0.7 | (0.4, 1.2) | 0.1 | (0.0, 0.3) |
| **Noticed any advertisement, sponsorship, or promotion** | 28.4 | (23.8, 33.5) | 24.8 | (21.7, 28.3) | 28.0 | (24.3, 32.0) | 22.6 | (17.3, 28.8) |

**Table 8.4: Percentage of current smokers aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | | | Gender | | | |
|---|---|---|---|---|---|---|
| **Place** | **Overall** | | **Male** | | **Female** | |
| | | | *Percentage (95% CI)* | | | |
| *Noticed advertisements* | | | | | | |
| In stores where cigarettes are sold | 15.4 | (12.0, 19.6) | 15.5 | (11.9, 19.9) | 14.9 | (8.2, 25.5) |
| On television | 2.4 | (1.3, 4.3) | 2.4 | (1.3, 4.6) | 2.0 | (0.6, 6.9) |
| On the radio | 0.7 | (0.3, 1.9) | 0.7 | (0.2, 2.1) | 1.1 | (0.2, 5.5) |
| On billboards | 3.4 | (2.1, 5.5) | 3.1 | (1.9, 5.2) | 5.7 | (2.0, 15.4) |
| In newspapers or magazines | 2.2 | (1.2, 4.2) | 2.3 | (1.2, 4.4) | 1.5 | (0.4, 5.8) |
| In cinemas | 3.2 | (2.1, 4.6) | 3.5 | (2.4, 5.2) | 0.0 | |
| On the Internet | 8.3 | (6.3, 10.8) | 8.5 | (6.3, 11.2) | 7.0 | (3.1, 15.1) |
| On public transportation vehicles or stations | 6.3 | (4.5, 8.8) | 5.9 | (4.2, 8.1) | 10.0 | (4.0, 22.9) |
| Somewhere else | 3.4 | (2.2, 5.1) | 3.6 | (2.3, 5.6) | 1.0 | (0.1, 6.5) |
| *Noticed sports sponsorship* | 1.3 | (0.6, 2.6) | 1.2 | (0.6, 2.5) | 1.8 | (0.4, 7.7) |
| *Noticed cigarette promotions* | | | | | | |
| Free samples | 2.3 | (1.2, 4.1) | 2.0 | (1.2, 3.5) | 4.3 | (1.1, 15.1) |
| Sale prices | 0.7 | (0.4, 1.3) | 0.7 | (0.3, 1.3) | 0.9 | (0.1, 6.2) |
| Coupons | 0.6 | (0.2, 1.7) | 0.6 | (0.2, 1.8) | 0.4 | (0.1, 3.1) |
| Free gifts/discounts on other products | 5.4 | (3.5, 8.2) | 5.0 | (3.2, 7.7) | 8.6 | (4.0, 17.4) |
| Clothing/item with brand name or logo | 4.8 | (3.1, 7.3) | 5.1 | (3.3, 7.8) | 2.4 | (0.6, 8.5) |
| Mail promoting cigarettes | 0.9 | (0.3, 2.2) | 0.9 | (0.3, 2.4) | 0.8 | (0.1, 5.8) |
| **Noticed any advertisement, sponsorship, or promotion** | 29.1 | (24.8, 33.8) | 28.9 | (24.3, 33.9) | 31.2 | (21.2, 43.3) |

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

**Table 8.4 (cont.): Percentage of current smokers aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | Age (Years) | | | | Residence | | | |
|---|---|---|---|---|---|---|---|---|
| **Places** | **15-24** | | **25+** | | **Urban** | | **Rural** | |
| | *Percentage (95% CI)* | | | | | | | |
| *Noticed advertisements* | | | | | | | | |
| In stores where cigarettes are sold | 16.9 | (9.6, 28.1) | 15.3 | (11.9, 19.5) | 15.8 | (11.6, 21.2) | 14.8 | (9.5, 22.2) |
| On television | 2.2 | (0.3, 14.4) | 2.4 | (1.4, 4.2) | 2.4 | (1.1, 5.2) | 2.4 | (1.0, 5.5) |
| On the radio | 0.0 | | 0.8 | (0.3, 2.2) | 0.9 | (0.3, 2.7) | 0.5 | (0.1, 3.3) |
| On billboards | 2.5 | (0.6, 9.6) | 3.5 | (2.1, 5.9) | 3.2 | (1.6, 6.3) | 3.7 | (1.8, 7.4) |
| In newspapers or magazines | 0.9 | (0.1, 6.1) | 2.4 | (1.2, 4.6) | 1.8 | (0.7, 4.5) | 3.0 | (1.2, 7.2) |
| In cinemas | 6.9 | (2.8, 16.3) | 2.7 | (1.8, 4.1) | 4.4 | (3.0, 6.3) | 1.0 | (0.1, 6.5) |
| On the Internet | 17.2 | (9.4, 29.3) | 7.3 | (5.4, 9.7) | 10.2 | (7.6, 13.5) | 4.8 | (2.3, 9.8) |
| On public transportation vehicles or stations | 7.4 | (3.8, 13.6) | 6.2 | (4.4, 8.8) | 7.2 | (4.8, 10.8) | 4.7 | (2.6, 8.2) |
| Somewhere else | 3.3 | (0.8, 13.3) | 3.4 | (2.2, 5.1) | 3.4 | (2.4, 4.8) | 3.3 | (1.1, 9.1) |
| *Noticed sports sponsorship* | 1.7 | (0.2, 12.5) | 1.2 | (0.6, 2.4) | 1.5 | (0.6, 3.5) | 0.8 | (0.2, 3.0) |
| *Noticed cigarette promotions* | | | | | | | | |
| Free samples | 6.1 | (1.8, 18.8) | 1.8 | (1.0, 3.3) | 3.0 | (1.5, 5.7) | 1.0 | (0.2, 4.0) |
| Sale prices | 1.3 | (0.4, 5.0) | 0.6 | (0.3, 1.3) | 0.8 | (0.4, 1.6) | 0.6 | (0.2, 1.4) |
| Coupons | 1.2 | (0.2, 8.4) | 0.6 | (0.2, 1.7) | 0.7 | (0.2, 2.3) | 0.5 | (0.1, 2.3) |
| Free gifts/discounts on other products | 12.2 | (5.8, 23.8) | 4.6 | (2.9, 7.1) | 7.3 | (4.6, 11.2) | 1.9 | (0.5, 7.5) |
| Clothing/item with brand name or logo | 7.3 | (2.7, 18.5) | 4.5 | (2.9, 7.0) | 4.8 | (2.7, 8.4) | 4.8 | (2.7, 8.6) |
| Mail promoting cigarettes | 0.0 | | 1.0 | (0.4, 2.5) | 1.3 | (0.5, 3.4) | 0.1 | (0.0, 1.0) |
| **Noticed any advertisement, sponsorship, or promotion** | 39.7 | (29.1, 51.5) | 27.9 | (23.5, 32.8) | 30.8 | (25.6, 36.6) | 26.1 | (19.0, 34.6) |

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

**Table 8.5: Percentage of current nonsmokers aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | | | Gender | | | |
|---|---|---|---|---|---|---|
| **Place** | **Overall** | | **Male** | | **Female** | |
| | | | *Percentage (95% CI)* | | | |
| *Noticed advertisements* | | | | | | |
| In stores where cigarettes are sold | 13.6 | (10.9, 16.8) | 14.0 | (10.6, 18.2) | 13.4 | (10.7, 16.6) |
| On television | 2.6 | (1.9, 3.7) | 2.3 | (1.1, 4.6) | 2.8 | (2.0, 3.8) |
| On the radio | 0.7 | (0.5, 1.2) | 0.7 | (0.2, 1.8) | 0.8 | (0.5, 1.3) |
| On billboards | 2.6 | (1.9, 3.7) | 2.5 | (1.4, 4.5) | 2.7 | (1.9, 3.8) |
| In newspapers or magazines | 2.6 | (1.9, 3.6) | 2.8 | (1.7, 4.5) | 2.6 | (1.8, 3.7) |
| In cinemas | 1.9 | (1.3, 2.7) | 2.0 | (1.2, 3.1) | 1.9 | (1.3, 2.7) |
| On the internet | 6.7 | (5.3, 8.4) | 6.6 | (4.7, 9.1) | 6.7 | (5.1, 8.8) |
| On public transportation vehicles or stations | 4.0 | (2.6, 6.0) | 4.3 | (2.5, 7.5) | 3.8 | (2.5, 5.8) |
| Somewhere else | 1.6 | (0.8, 3.4) | 1.3 | (0.6, 2.7) | 1.8 | (0.8, 4.0) |
| *Noticed sports sponsorship* | 1.3 | (0.8, 2.0) | 1.3 | (0.7, 2.7) | 1.2 | (0.7, 2.0) |
| *Noticed cigarette promotions* | | | | | | |
| Free samples | 1.2 | (0.8, 1.8) | 1.2 | (0.6, 2.1) | 1.2 | (0.8, 1.9) |
| Sale prices | 0.2 | (0.1, 0.4) | 0.1 | (0.0, 0.6) | 0.2 | (0.1, 0.6) |
| Coupons | 0.5 | (0.3, 0.9) | 0.5 | (0.2, 1.3) | 0.5 | (0.2, 1.0) |
| Free gifts/discounts on other products | 1.0 | (0.6, 1.4) | 0.8 | (0.4, 1.5) | 1.0 | (0.6, 1.7) |
| Clothing/item with brand name or logo | 1.5 | (0.9, 2.3) | 1.3 | (0.8, 2.3) | 1.5 | (0.9, 2.5) |
| Mail promoting cigarettes | 0.3 | (0.2, 0.6) | 0.3 | (0.1, 0.8) | 0.3 | (0.2, 0.7) |
| **Noticed any advertisement, sponsorship, or promotion** | 24.6 | (21.4, 28.2) | 24.2 | (20.1, 29.0) | 24.9 | (21.4, 28.7) |

Note: Current nonsmokers includes both former and never smokers.

**Table 8.5 (cont.): Percentage of current nonsmokers aged ≥15 years who had noticed cigarette marketing during the last 30 days in various places, by selected demographic characteristics – GATS Kazakhstan, 2014.**

| | Age (Years) | | | | Residence | | | |
|---|---|---|---|---|---|---|---|---|
| **Place** | **15-24** | | **25+** | | **Urban** | | **Rural** | |
| | *Percentage (95% CI)* | | | | | | | |
| *Noticed advertisements* | | | | | | | | |
| In stores where cigarettes are sold | 12.6 | (8.9, 17.6) | 13.9 | (11.4, 17.0) | 12.8 | (9.9, 16.5) | 14.5 | (10.1, 20.2) |
| On television | 2.6 | (1.3, 5.3) | 2.6 | (1.9, 3.6) | 2.7 | (1.9, 4.0) | 2.5 | (1.3, 4.5) |
| On the radio | 0.8 | (0.3, 2.0) | 0.7 | (0.5, 1.1) | 0.8 | (0.5, 1.3) | 0.7 | (0.3, 1.5) |
| On billboards | 3.4 | (1.9, 6.0) | 2.4 | (1.7, 3.3) | 3.1 | (2.0, 4.9) | 2.0 | (1.2, 3.5) |
| In newspapers or magazines | 3.6 | (2.2, 5.9) | 2.3 | (1.7, 3.2) | 3.1 | (2.1, 4.6) | 2.1 | (1.2, 3.6) |
| In cinemas | 2.0 | (1.1, 3.5) | 1.9 | (1.3, 2.8) | 2.6 | (1.7, 3.9) | 1.1 | (0.5, 2.1) |
| On the Internet | 10.6 | (7.8, 14.3) | 5.2 | (4.1, 6.7) | 9.1 | (6.9, 11.8) | 3.8 | (2.5, 5.7) |
| On public transportation vehicles or stations | 4.7 | (2.6, 8.2) | 3.7 | (2.5, 5.5) | 3.5 | (1.9, 6.5) | 4.6 | (2.6, 7.9) |
| Somewhere else | 1.9 | (0.8, 4.5) | 1.5 | (0.7, 3.3) | 2.1 | (0.8, 5.3) | 1.1 | (0.3, 3.5) |
| *Noticed sports sponsorship* | 2.5 | (1.3, 4.6) | 0.8 | (0.5, 1.3) | 1.7 | (1.1, 2.7) | 0.7 | (0.2, 2.5) |
| *Noticed cigarette promotions* | | | | | | | | |
| Free samples | 1.5 | (0.7, 2.9) | 1.1 | (0.7, 1.7) | 2.0 | (1.3, 3.0) | 0.3 | (0.1, 0.8) |
| Sale prices | 0.2 | (0.0, 0.8) | 0.2 | (0.1, 0.5) | 0.3 | (0.1, 0.8) | 0.1 | (0.0, 0.3) |
| Coupons | 1.0 | (0.4, 2.3) | 0.3 | (0.2, 0.7) | 0.7 | (0.4, 1.4) | 0.2 | (0.1, 0.7) |
| Free gifts/discounts on other products | 0.9 | (0.4, 1.8) | 1.0 | (0.6, 1.5) | 1.4 | (0.9, 2.2) | 0.4 | (0.1, 1.2) |
| Clothing/item with brand name or logo | 1.4 | (0.7, 2.7) | 1.5 | (0.9, 2.4) | 1.7 | (1.1, 2.8) | 1.1 | (0.4, 2.9) |
| Mail promoting cigarettes | 0.6 | (0.2, 1.4) | 0.3 | (0.1, 0.5) | 0.5 | (0.3, 1.0) | 0.1 | (0.0, 0.3) |
| **Noticed any advertisement, sponsorship, or promotion** | 27.1 | (22.3, 32.6) | 23.8 | (20.5, 27.3) | 27.0 | (23.1, 31.4) | 21.8 | (16.6, 28.0) |

Note: Current nonsmokers includes both former and never smokers.

# 9. KNOWLEDGE, ATTITUDES, AND PERCEPTIONS

Despite the strong evidence on the danger of smoking, relatively few smokers understand the health risks of this activity. People are generally aware that smoking tobacco is harmful, but many smokers are not able to name the diseases caused by smoking, other than lung cancer. We know, however, that knowledge of the consequences of smoking increases motivation for quitting [5].

This chapter provides information about beliefs among the adult population (ages 15+) of Kazakhstan about illnesses due to smoking, the negative impact on health of secondhand smoking, use of hookah and smokeless tobacco, and a dangerous dependence on cigarettes. It also captures public opinion about prohibiting indoor smoking in various places and about potential tobacco control laws.

***Key findings:***

- *A strong majority (84.9%) of adults believed that smoking causes serious illness.*
- *Significantly more nonsmokers (88.3%) than current smokers (73.0%) believed that smoking causes serious illness.*
- *Approximately three-fourths (74.0%)of all adults but just 57.3% of current smokers believed that breathing other people's smoke causes serious illness in nonsmokers.*
- *About one-third (32.1%) of current smokers believed that certain types of cigarettes could be less harmful than other types.*
- *Only 57.7% of adults believed that smoking hookah causes serious illness.*
- *Only 53.7% of current users of smokeless tobacco believed that smokeless tobacco causes serious illness.*
- *Just over three-fourths (77.2%) of adults supported a total ban on smoking in all indoor work placesand indoor public places.*
- *Almost two-thirds (65.2%) of adults supported raising taxes on tobacco products.*
- *A strong majority (83.9%) of adults supported a total ban on tobacco advertising.*

## 9.1. Beliefs About the Dangers of Smoking

**Table 9.1** shows the percentages of adults aged ≥15 years who believed that smoking causes serious diseases generally and stroke, heart attack, cancer of the lung/ bladder/stomach, premature birth, bone loss, diseases of the male reproductive system, erectile dysfunction, stomach ulcers, and bronchitis specifically. These estimates were calculated by smoking status and selected demographic characteristics.

Overall, 84.9% of the adult population believed that tobacco smoking causes serious diseases, with a higher percentage of females (90.1%) than males (79.1%) believing this to be true. Nonsmokers (88.3%) were more likely to believe this than were current smokers (73.0%). No significant differences in this belief were found by residence (85.8%, urban; 83.6%, rural) or education. Similarly, there were no differences by age, with a tight range of estimates for the four age groups: 84.1% to 85.9%.

By disease or condition, however, there was considerable variation in the estimates obtained in the GATS. Estimates above 70% were obtained for such well-known diseases as lung cancer (88.5%), bronchitis (78.9%), and gastric ulcer (71.1%); for other serious diseases or conditions the estimates ranged from 67.6% for stroke and 67.2% for heart attack all the way down to 41.0% for bladder cancer.

By age group, there were only a few cases of significant differences in the percentage of adults who believed that smoking caused a specific serious disease or condition. These included two problems affecting men, as adults 65+ were significantly less likely than those 45-64 to believe that smoking causes diseases of the male reproductive system (43.4% vs. 54.7%) and erectile dysfunction (44.1% vs. 56.2%).

Several significant differences were found by residence, with the estimate higher in every case for those who lived in urban areas. These included stroke (70.8% vs. 63.3%), heart attack (72.2% vs.60.7%), bladder cancer (44.5% vs. 36.4%), diseases of male reproductive system (54.7%vs. 46.6%), and erectile dysfunction (56.8% vs. 47.7%).

Consistent with their higher level of belief about serious illnesses generally, forevery specific disease or condition analyzed the GATS found a higher percentage of women than men believing that smoking caused the problem. Similarly, for every problem included in **Table 9.1**, a significantly higher percentage of nonsmokers than smokers believed in the causative status of smoking. For two outcomes ─ bladder cancer and diseases of the male reproductive system ─ less than 40% of smokers believed that smoking was causative.

**Table 9.1: Percentage of adults aged ≥15 years who believed that smoking causes serious illness and various diseases, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Adults who believed that smoking causes… | Serious illness | Stroke | Heart attack | Lung cancer | Bladder cancer | Stomach cancer |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| **Overall** | 84.9 (82.8, 86.7) | 67.6 (65.2, 69.8) | 67.2 (64.6, 69.7) | 88.5 (86.5, 90.3) | 41.0 (38.2, 43.8) | 66.2 (63.3, 69.0) |
| *Smoking status* | | | | | | |
| Current smokers[1] | 73.0 (68.6, 76.9) | 54.9 (50.5, 59.3) | 54.4 (50.1, 58.7) | 80.4 (76.8, 83.6) | 27.8 (24.0, 31.8) | 49.5 (44.6, 54.3) |
| Nonsmokers[2] | 88.3 (86.3, 90.1) | 71.2 (68.6, 73.6) | 70.8 (68.0, 73.5) | 90.8 (88.6, 92.6) | 44.8 (41.5, 48.0) | 71.0 (67.9, 73.9) |
| *Gender* | | | | | | |
| Male | 79.1 (76.1, 81.8) | 61.3 (58.3, 64.3) | 60.2 (57.0, 63.2) | 83.9 (81.0, 86.4) | 34.2 (31.0, 37.7) | 57.7 (54.0, 61.4) |
| Female | 90.1 (88.2, 91.7) | 73.1 (70.1, 75.9) | 73.5 (70.2, 76.5) | 92.6 (90.7, 94.1) | 47.0 (43.5, 50.5) | 73.7 (70.8, 76.5) |
| *Age (years)* | | | | | | |
| 15-24 | 84.7 (81.0, 87.8) | 63.5 (58.8, 68.0) | 62.8 (58.2, 67.3) | 87.2 (83.1, 90.5) | 38.7 (34.5, 43.1) | 63.9 (58.7, 68.7) |
| 25-44 | 84.1 (81.2, 86.7) | 66.6 (63.7, 69.4) | 66.3 (63.2, 69.3) | 88.0 (85.6, 90.0) | 40.2 (36.9, 43.6) | 64.1 (60.3, 67.8) |
| 45-64 | 85.9 (82.9, 88.4) | 72.3 (68.7, 75.6) | 71.6 (67.7, 75.3) | 90.0 (87.5, 92.0) | 43.2 (39.4, 47.1) | 70.5 (66.8, 73.8) |
| 65+ | 85.7 (81.3, 89.1) | 67.8 (61.8, 73.2) | 68.8 (63.8, 73.4) | 89.7 (85.5, 92.8) | 43.7 (38.1, 49.4) | 68.6 (63.2, 73.6) |
| *Residence* | | | | | | |
| Urban | 85.8 (83.3, 88.0) | 70.8 (67.9, 73.6) | 72.2 (68.9, 75.2) | 89.3 (86.9, 91.3) | 44.5 (41.0, 48.1) | 67.5 (64.0, 70.9) |
| Rural | 83.6 (80.1, 86.6) | 63.3 (59.5, 67.0) | 60.7 (56.4, 64.9) | 87.5 (83.9, 90.4) | 36.4 (32.1, 41.0) | 64.5 (59.5, |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 69.1) |
| *Education level*[3] | | | | | | | | | | | | |
| Primary or less | 78.9 | (70.3, 85.6) | 62.1 | (51.8, 71.3) | 62.6 | (53.5, 70.9) | 88.7 | (80.8, 93.7) | 40.8 | (32.2, 50.0) | 66.9 | (59.2, 73.8) |
| Secondary general | 82.7 | (78.6, 86.1) | 63.5 | (58.1, 68.7) | 63.5 | (58.2, 68.5) | 86.6 | (82.2, 90.1) | 41.5 | (36.1, 47.1) | 67.0 | (61.8, 71.9) |
| Secondary technical | 86.1 | (82.8, 88.8) | 70.5 | (66.3, 74.4) | 68.4 | (64.1, 72.4) | 90.7 | (88.2, 92.7) | 40.0 | (35.9, 44.2) | 67.8 | (63.3, 72.0) |
| College or above | 86.4 | (83.6, 88.8) | 71.8 | (68.8, 74.6) | 72.7 | (69.5, 75.7) | 89.2 | (86.6, 91.3) | 43.4 | (39.9, 47.0) | 66.5 | (63.0, 69.7) |

[1] Includes daily and occasional (less than daily) smokers.

2 Includes former and never smokers.

3 Education level is reported only for persons aged 25+ years.

**Table 9.1 (cont.): Percentage of adults aged ≥15 years who believed that smoking causes serious illness and various diseases, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Adults who believed that smoking causes… | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Premature birth | | Bone loss | | Diseases of male reproductive system | | Erectile dysfunction | | Stomach ulcer | | Bronchitis | |
| | *Percentage (95% CI)* | | | | | | | | | | | |
| **Overall** | 60.2 | (57.6, 62.8) | 57.0 | (54.2, 59.7) | 51.2 | (48.4, 53.9) | 52.9 | (50.0, 55.7) | 71.1 | (68.1, 73.9) | 78.9 | (75.4, 82.0) |
| *Smoking status* | | | | | | | | | | | | |
| Current smokers[1] | 42.3 | (38.2, 46.4) | 43.8 | (39.6, 48.1) | 36.7 | (33.1, 40.5) | 40.2 | (36.4, 44.2) | 56.8 | (52.1, 61.4) | 71.9 | (67.1, 76.1) |
| Nonsmokers[2] | 65.3 | (62.3, 68.2) | 60.7 | (57.5, 63.8) | 55.3 | (52.2, 58.4) | 56.5 | (53.3, 59.6) | 75.2 | (72.1, 78.0) | 80.9 | (77.1, 84.2) |
| *Gender* | | | | | | | | | | | | |
| Male | 48.7 | (45.4, 52.0) | 49.3 | (45.8, 52.8) | 45.6 | (42.0, 49.2) | 48.2 | (44.8, 51.7) | 64.5 | (60.8, 68.0) | 75.0 | (71.0, 78.6) |
| Female | 70.3 | (66.9, 73.5) | 63.8 | (60.5, 66.9) | 56.2 | (53.1, 59.3) | 57.0 | (53.7, 60.3) | 77.0 | (73.8, 79.9) | 82.4 | (78.6, 85.6) |
| *Age (years)* | | | | | | | | | | | | |
| 15-24 | 56.7 | (52.2, 61.1) | 54.3 | (49.1, 59.3) | 49.8 | (44.8, 54.8) | 52.0 | (47.0, 57.0) | 66.6 | (61.7, 71.1) | 77.1 | (72.1, 81.5) |
| 25-44 | 61.6 | (58.6, 64.4) | 56.9 | (53.6, 60.2) | 51.2 | (48.1, 54.3) | 53.0 | (49.6, 56.3) | 69.6 | (65.5, 73.4) | 78.7 | (74.8, 82.2) |
| 45-64 | 63.4 | (59.6, 66.9) | 60.6 | (57.1, 64.0) | 54.7 | (50.9, 58.5) | 56.2 | (52.0, 60.2) | 76.4 | (73.0, 79.5) | 80.2 | (76.0, 83.9) |
| 65+ | 53.6 | (47.4, 59.7) | 53.1 | (47.5, 58.7) | 43.4 | (37.4, 49.6) | 44.1 | (38.2, 50.2) | 73.2 | (68.0, 77.9) | 79.9 | (74.6, 84.3) |
| *Residence* | | | | | | | | | | | | |
| Urban | 60.6 | (57.1, 64.1) | 59.7 | (56.4, 63.0) | 54.7 | (51.5, 57.8) | 56.8 | (53.5, 60.1) | 72.7 | (69.3, 75.8) | 82.7 | (78.3, 86.4) |
| Rural | 59.7 | (55.7, 63.6) | 53.4 | (48.8, 57.9) | 46.6 | (41.9, 51.3) | 47.7 | (42.9, 52.5) | 69.0 | (63.7, 73.8) | 73.9 | (68.0, 79.0) |
| *Education level*[3] | | | | | | | | | | | | |
| Primary or less | 47.7 | (40.1, 55.4) | 49.4 | (41.1, 57.7) | 41.3 | (32.2, 51.0) | 42.0 | (33.0, 51.6) | 68.6 | (60.4, 75.8) | 83.2 | (73.9, 89.6) |
| Secondary general | 58.2 | (52.9, 63.3) | 53.1 | (47.4, 58.6) | 49.3 | (44.3, 54.3) | 49.0 | (43.5, 54.5) | 71.6 | (66.4, 76.3) | 74.9 | (69.0, 79.9) |
| Secondary technical | 62.7 | (58.6, 66.6) | 58.9 | (54.6, 63.1) | 52.0 | (48.0, 55.9) | 52.6 | (48.3, 56.9) | 71.8 | (67.6, 75.7) | 79.0 | (74.0, 83.3) |
| College or above | 64.3 | (60.6, 67.8) | 61.2 | (57.4, 65.0) | 54.4 | (50.9, 57.8) | 57.9 | (54.3, 61.5) | 74.1 | (70.3, 77.6) | 82.1 | (78.3, 85.4) |

[1] Includes daily and occasional (less than daily) smokers.

## 9.2. Beliefs about the Harms of Exposure to Secondhand Smoke

**Table 9.2** presents the percentages of adults by smoking status, gender, age, residence, and education who believed that breathing other people's smoke causes serious illness in nonsmokers; overall, 74.0% of adults believed this was true. Current smokers were significantly less likely than nonsmokers to believe this:57.3% versus 74.0%. By gender, a significantly greater percentage of women (81.5%) than men (65.6%) believed in the harm described. There were no significant differences by age group.

The rate for rural residents (70.9%) was lower than the rate for urban residents (76.3%) but not significantly so.

**Table 9.2: Percentage of adults aged ≥15 years who believed that breathing other people's smoke causes serious illness in nonsmokers, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Believed that breathing other people's smoke causes serious illness in non-smokers |
|---|---|
| | *Percentage (95% CI)* |
| **Overall** | 74.0 (71.0, 76.8) |
| *Smoking status* | |
| Current smokers[1] | 57.3 (51.9, 62.5) |
| Nonsmokers[2] | 78.8 (75.8, 81.5) |
| *Gender* | |
| Male | 65.6 (61.8, 69.2) |
| Female | 81.5 (78.1, 84.4) |
| *Age (years)* | |
| 15-24 | 72.3 (67.0, 76.9) |
| 25-44 | 73.9 (70.4, 77.0) |
| 45-64 | 74.6 (70.9, 78.0) |
| 65+ | 77.0 (71.5, 81.8) |
| *Residence* | |
| Urban | 76.3 (73.1, 79.3) |
| Rural | 70.9 (65.5, 75.8) |
| *Education level*[3] | |
| Primary or less | 70.7 (60.3, 79.4) |
| Secondary general | 72.6 (68.0, 76.8) |
| Secondary technical | 73.3 (68.9, 77.2) |
| College or above | 77.3 (74.2, 80.1) |

[1] Includes daily and occasional (less than daily) smokers

[2] Includes former and never smokers.

[3] Education level is reported only for persons aged 25+years.

## 9.3. Beliefs About the Dangers of Hookah Smoking

**Table 9.3** presents data on the percentage of adults who believed that smoking hookah causes serious illness, both overall and by smoking status and selected demographic characteristics. Overall, only 57.7% of adults believed that smoking hookah causes serious illness, with the estimate for nonsmokers (62.3%) much higher than the rate for current smokers (42.0%) and the estimate for females (63.0%) well above that for males (51.9%). No significant difference was found by residence (60.2%, urban; 54.5%, rural). By age, the study found that adults who were 65 or older (46.5%) were significantly less likely than those in any of the other age groups to believe that hookah causes serious illness. Analysis by educational attainment found that 63.5% of those with the most education (college or above) believed that hookah causes serious illness, an estimate that was significantly higher than the results for having a primary or less education (43.5%) or secondary technical (55.0%).

**Table 9.3: Percentage of adults aged ≥15 years who believed that smoking hookah causes serious illness, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Believed that smoking hookah causes serious illness | |
|---|---|---|
| | *Percentage (95% CI)* | |
| **Overall** | 57.7 | (54.8, 60.6) |
| *Smoking status* | | |
| Current smokers[1] | 42.0 | (37.8, 46.3) |
| Nonsmokers[2] | 62.3 | (59.1, 65.4) |
| *Gender* | | |
| Male | 51.9 | (48.5, 55.3) |
| Female | 63.0 | (59.5, 66.3) |
| *Age (years)* | | |
| 15-24 | 59.0 | (54.7, 63.1) |
| 25-44 | 59.3 | (55.7, 62.8) |
| 45-64 | 58.0 | (53.7, 62.3) |
| 65+ | 46.5 | (41.4, 51.7) |
| *Residence* | | |
| Urban | 60.2 | (56.7, 63.6) |
| Rural | 54.5 | (49.6, 59.3) |
| *Education level*[3] | | |
| Primary or less | 43.5 | (35.8, 51.5) |
| Secondary general | 53.9 | (47.7, 60.1) |
| Secondary technical | 55.0 | (51.3, 58.7) |
| College or above | 63.5 | (59.9, 67.0) |

[1] Includes daily and occasional (less than daily) smokers

[2] Includes former and never smokers.

[3] Education level is reported only for persons aged 25+ years.

## 9.4. Beliefs About the Dangers of Smokeless Tobacco Use

**Table 9.4** presents the percentages of adults who believed that using smokeless tobacco causes serious illness, both overall and by user status and selected demographic characteristics. Overall, almost three-fourths (73.1%) of adults believed that using smokeless tobacco causes serious illness, with 73.3% of nonusers but just 53.7% of current users believing that. Significantly more females (77.8%) than males (67.7%) believed in the harm of using smokeless tobacco. No significant differences were found in the analysis by age group, residence, or education.

**Table 9.4: Percentage of adults aged ≥15 years who believed that using smokeless tobacco causes serious illness, by user status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Believed that using smokeless tobacco causes serious illness |
|---|---|
| | *Percentage (95% CI)* |
| **Overall** | 73.1 (70.4, 75.5) |
| *Smokeless tobacco status* | |
| Current user[1] | 53.7 (40.7, 66.2) |
| Nonuser[2] | 73.3 (70.7, 75.8) |
| *Gender* | |
| Male | 67.7 (64.6, 70.7) |
| Female | 77.8 (74.7, 80.6) |
| *Age (years)* | |
| 15-24 | 74.1 (69.9, 78.0) |
| 25-44 | 72.3 (69.1, 75.3) |
| 45-64 | 74.8 (71.3, 78.1) |
| 65+ | 68.0 (62.6, 73.0) |
| *Residence* | |
| Urban | 75.2 (72.3, 78.0) |
| Rural | 70.2 (65.4, 74.6) |
| *Education level*[3] | |
| Primary or less | 60.9 (52.3, 68.9) |
| Secondary general | 70.6 (65.3, 75.4) |
| Secondary technical | 71.7 (67.9, 75.2) |
| College or above | 76.7 (73.8, 79.4) |

[1] Includes daily and occasional (less than daily) users.

[2] Includes former and never users.

[3] Education level is reported only for persons aged 25+ years.

## 9.5. Beliefs About the Dangers of Cigarette Smoking

There is a common misconception that some types of cigarettes (e.g., light, low-tar, menthol) may be less dangerous than other types. Unfortunately, this leads some smokers to believe they are safe because they are smoking certain types of cigarettes. Thus, even though cigarettes are known to be addictive, it is important to determine whether particular adults are more likely than others to share this belief. **Table 9.5** presents results for two beliefs, one false and one true: 1) certain types of cigarettes could be less harmful than others; and 2) cigarettes are addictive. The results are presented both overall and by smoking status and demographic characteristics.

Among adults in general, 15.1% believed that certain types of cigarettes can cause less harm than others. By smoking status, the study found that a significantly greater percentage of current smokers, which including daily and occasional smokers (32.1%), believed this than did nonsmokers (10.2%). Also, nearly three times as many men (22.6%) as women (8.4%) believed this. Analysis by age found that the oldest group (65+ years, 5.6%) was significantly less susceptible to this misconception than any of the other age groups. Analysis by residence, in contrast, found little difference by area (15.8% for urban and14.2% for rural).

The great majority of adults (92.4%) believed that cigarettes are addictive with similar estimates were observed for current smokers (93.0%) and nonsmokers (92.3%). Males and females had virtually identical estimates, but age seemed to make a difference, as the estimate for those 65+ (88.0%) was significantly below the estimate for those 45-64 (94.3%) and on the borderline of being significantly under the estimate for those 25-44 (92.6%). By education, the survey found that those with the least education (primary or less) were significantly less likely than those with a secondary technical education to believe that cigarettes are addictive (87.8% vs. 94.2%).

**Table 9.5: Percentages of adults aged ≥15 years who believed that some types of cigarettes could be less harmful than others and that cigarettes are addictive, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Believed that some types of cigarettes could be less harmful than others | | Believed that cigarettes are addictive | |
|---|---|---|---|---|
| | *Percentage (95% CI)* | | | |
| **Overall** | 15.1 | (13.2, 17.2) | 92.4 | (91.0, 93.6) |
| *Smoking status* | | | | |
| Current smoker[1] | 32.1 | (27.7, 36.9) | 93.0 | (90.7, 94.8) |
| Nonsmoker[2] | 10.2 | (8.6, 12.0) | 92.3 | (90.7, 93.6) |
| *Gender* | | | | |
| Male | 22.6 | (19.6, 25.9) | 92.3 | (90.7, 93.7) |
| Female | 8.4 | (6.8, 10.3) | 92.5 | (90.8, 93.9) |
| *Age (years)* | | | | |
| 15-24 | 16.3 | (13.3, 19.8) | 91.5 | (88.6, 93.7) |
| 25-44 | 18.1 | (15.3, 21.2) | 92.6 | (90.9, 94.0) |
| 45-64 | 12.8 | (10.3, 15.8) | 94.3 | (92.3, 95.8) |
| 65+ | 5.6 | (3.9, 7.9) | 88.0 | (84.3, 90.9) |
| *Residence* | | | | |
| Urban | 15.8 | (13.4, 18.5) | 93.4 | (91.9, 94.6) |
| Rural | 14.2 | (11.3, 17.7) | 91.2 | (88.4, 93.3) |
| *Education level*[3] | | | | |
| Primary or less | 9.2 | (5.1, 15.9) | 87.8 | (81.5, 92.2) |
| Secondary general | 12.4 | (9.8, 15.7) | 91.2 | (88.5, 93.3) |
| Secondary technical | 14.7 | (11.4, 18.8) | 94.2 | (92.3, 95.7) |
| College or above | 17.0 | (14.4, 19.9) | 93.2 | (91.2, 94.7) |

[1] Includes daily and occasional (less than daily) smokers
[2] Includes former and never smokers.
[3] Education level is reported only for persons aged 25+ years.

## 9.6. Opinions About Prohibiting Indoor Smoking in Various Places

Participants were asked about their support for a law completely prohibiting smoking in all indoor workplaces and public places and not permitting designated smoking areas indoors. Included in the law would be indoor workplaces, universities, colleges, schools, health-care facilities, restaurants, bars and cafeterias/cafes, and nightclubs. Overall (**Table 9.6**), just over three-fourths (77.2%) of adults supported such a law, but, as expected, there was a dramatic difference in level of support between current smokers (49.3%) and nonsmokers (85.3%).

## 9.7.Support for Various Tobacco Control Laws

In addition to being asked about the law regarding total prohibition of smoking indoors, participants in GATS were asked whether they favored two other tobacco control laws. **Table 9.6** presents the percentages of adults who would support (a) increasing taxes on tobacco products, and (b) a law prohibiting all advertisements for tobacco products. Just under two-thirds 65.2%) of adults favored an increase in taxes, with, not surprisingly, a very large difference on this issue between nonsmokers (75.7%) and current smokers (28.5%). Prevalence was greater among women (75.4%) than men (53.7%). Adults at the highest educational level (college or above) had greater prevalence of favorability toward such a law than adults at any other educational level (70.3%, vs. 52.9% for primary or less, 59.6% for secondary general, and 59.9% for secondary technical).

Overall, 83.9% of adults had a positive attitude towards a total ban on tobacco advertising. However, there was a significant difference in the percentages of current smokers (68.9%) and nonsmokers (88.2%) who supported such a law. As in the case of increasing taxes, more women than men (88.5% vs. 78.7%) favored a law prohibiting any advertising of tobacco products. Little difference was found here by area, with estimates of 82.7 % and 85.4% for rural. Educational attainment, also, did not seem to make much difference, as the results ranged from 81.7% for those with a primary education or less to 85.5% for adults with collegeor above.

**Table 9.6: Percentage of adults aged ≥15 years who would support various tobacco control laws, by smoking status and selected demographic characteristics – GATS Kazakhstan, 2014.**

| Demographic characteristic | Favored a law completely prohibiting smoking in all indoor workplaces and indoor public places* | | Favored increasing taxes on tobacco products | | Favored a law prohibiting all advertisements for tobacco products | |
|---|---|---|---|---|---|---|
| | *Percentage (95% CI)* | | | | | |
| **Overall** | 77.2 | (74.7, 79.6) | 65.2 | (62.5, 67.7) | 83.9 | (81.5, 86.0) |
| *Smoking status* | | | | | | |
| Current smoker[1] | 49.3 | (44.4, 54.1) | 28.5 | (24.3, 33.2) | 68.9 | (64.2, 73.2) |
| Nonsmoker[2] | 85.3 | (82.9, 87.4) | 75.7 | (72.6, 78.6) | 88.2 | (85.8, 90.2) |
| *Gender* | | | | | | |
| Male | 68.7 | (65.4, 71.9) | 53.7 | (50.6, 56.8) | 78.7 | (75.3, 81.7) |
| Female | 84.8 | (82.1, 87.2) | 75.4 | (72.2, 78.4) | 88.5 | (86.2, 90.5) |
| *Age (years)* | | | | | | |
| 15-24 | 81.5 | (77.4, 85.0) | 71.2 | (66.0, 75.9) | 84.1 | (80.3, 87.4) |
| 25-44 | 73.8 | (70.8, 76.6) | 61.0 | (58.1, 63.9) | 82.6 | (79.8, 85.1) |
| 45-64 | 76.7 | (73.3, 79.8) | 65.2 | (61.5, 68.8) | 84.5 | (81.1, 87.4) |
| 65+ | 83.5 | (78.3, 87.6) | 68.6 | (63.4, 73.4) | 87.1 | (83.0, 90.3) |
| *Residence* | | | | | | |
| Urban | 75.4 | (72.4, 78.1) | 64.3 | (61.1, 67.3) | 82.7 | (80.2, 84.9) |
| Rural | 79.6 | (75.3, 83.4) | 66.4 | (61.8, 70.6) | 85.4 | (80.8, 89.1) |
| *Education level*[3] | | | | | | |
| Primary or less | 72.4 | (63.7, 79.7) | 52.9 | (44.6, 61.1) | 81.7 | (72.3, 88.4) |
| Secondary general | 75.0 | (70.7, 78.9) | 59.6 | (54.1, 64.9) | 82.2 | (78.6, 85.3) |
| Secondary technical | 75.0 | (71.6, 78.1) | 59.9 | (56.4, 63.2) | 83.4 | (80.0, 86.4) |
| College or above | 78.1 | (74.7, 81.1) | 70.3 | (67.1, 73.2) | 85.5 | (82.5, 88.0) |

[1] Includes daily and occasional (less than daily) smokers.
[2] Includes former and never smokers.
[3] Education level is reported only for persons aged 25+ years.
* Such a law would not allow indoor designated smoking areas.

# 10. CONCLUSIONS

The GATS is a standard global tool for systematically monitoring tobacco use among adults and for tracking key indicators of tobacco control. The 2014 GATS Kazakhstan has been successful in both of these areas, with many of the measures formally assessed for the first time in the republic's history. The results, therefore, provide a timely, solid baseline for monitoring progress in national tobacco control, for implementing evidence-informed policy interventions, and for working towards the achievement of the global voluntary target of a 30% reduction in tobacco use by 2025. In addition, GATS enables international comparability and thus the opportunity to learn lessons about tobacco control from other countries. In brief, GATS Kazakhstan, 2014 represents a milestone for the establishment of a sustainable tobacco surveillance system that will support the policy-making process and the enactment of strong measures in line with the WHO FCTC. The results of the GATS are relevant and timely for public health policy, planning, and practice, and provide an opportunity to strengthen tobacco prevention and control.

This was the first time that the GATS was implemented in the Republic of Kazakhstan, and the survey enabled the republic to obtain estimates at the national level on the prevalence of smoked and smokeless tobacco use by gender, age group, residence, and education level. Additionally, the study provided detailed indicators of smoking status (daily smokers, occasional smokers), indicators characterizing exposure to secondhand smoke, and awareness and behavior of Kazakhstan adults in relation to the quit intentions of smokers and their attempts to quit smoking, all of which can be used to develop personalized methods to reduce smoking and increase the motivation to quit smoking. The GATS Kazakhstan 2014 was the first survey in the republic to obtain indicators for various aspects of tobacco control, such as the impact of media on the delivery of antismoking information, exposure to tobacco advertising, and economic issues such as the taxation of tobacco products and average monthly expenditures on cigarettes.

Data were collected from 97.2% of the 4,611 selected households that were randomly included from all 16 regions of the country with the use of a standard international methodology adapted to Kazakhstan's situation; this included a multistage random, stratified sample of households as well as the use of modern survey technology (handheld electronic devices). Implementation of the survey was led by the Ministry of Healthcare and Social Development of the Republic of Kazakhstan and carried out by the republic's National Centre for Problems of Healthy Lifestyle Development and the Agency on Statistics and its Information Computing Centre, with technical and financial support from international partners. Half of the funds for the GATS were provided by the Ministry of Healthcare and Social Development. To coordinate the project, a research working group was established under the Ministry. Many experts, including IT staff and field survey experts, were trained at various stages of the GATS during workshops conducted by international partners such as the U.S. CDC and the WHO, thereby increasing national capacity to conduct similar large-scale surveys at a high scientific level using the most advanced tools for data collection.

## 10.1 Policy Implications[4]

The prevalence of tobacco use as determined by the GATS Kazakhstan 2014 is comparable to some but not all of the results obtained by other GATS reports. For example, in the Russian Federation, according to the 2009 report [31], the percentage of current tobacco smokers among the adult population was much higher, at 39.1%, than it was in Kazakhstan, at 22.4%. In contrast, in Ukraine, 28.8% of adults currently smoked tobacco in 2010 [32]; in Turkey, the prevalence in 2012 was 27.1% [33].

Looking at the five previous national surveys in the Republic of Kazakhstan, (1998-2012) we can see a slight drop in the prevalence of cigarette smoking among the population older than 11 years, from 28.0% in 1998 to 26.5% in 2012 [7,8]. However, due to methodological differences in assessing the prevalence of smoking, caution must be urged in comparing the results of these five surveys with the results from the 2014 GATS.

The results from the GATS provide an appropriate and relevant baseline for monitoring the effectiveness of policies to control tobacco use in Kazakhstan. The data obtained add substantially new information on key indicators related to obligations contained in the WHO FCTC (which Kazakhstan joined in 2006) and related to the MPOWER package of measures supporting the implementation of the WHO FCTC. These new indicators will help to evaluate tobacco control policies, better protect the public from secondhand smoke, and promote a better understanding of relevant economic issues and the role of the media in raising public awareness about the dangers of tobacco use and the development of noncommunicable diseases among the smoking population. This new national data can contribute to further development of policies on tobacco control in Kazakhstan, in line with the WHO FCTC, and can also help identify new opportunities for tobacco control. The GATS results feed into the periodic reporting on the implementation of the WHO FCTC and on the progress made toward reaching the global voluntary targets



[4] *The policy recommendations in this chapter are consistent with the recommendations from the WHO FCTC and MPOWER. These recommendations are not, however, necessarily those of the U.S. Centers for Disease Control and Prevention (CDC).*

on noncommunicable diseases. Policy recommendations are given below, with the aim of developing, adopting, and implementing more effective tobacco control policies, specifically under the WHO FCTC legal obligations and its guidelines.

**Monitor – WHO FCTC: Article 20 "Research, surveillance and exchange of information"**

The GATS Kazakhstan 2014 was the republic's first survey to provide comprehensive, nationally representative data on tobacco use and tobacco control indicators among the adult population. The study showed that the prevalence of smoking was 22.4% (42.4% of men and 4.5% of women), with an estimated prevalence of 19.1% for daily smoking and 3.3% for occasional smoking. By far the most common type of tobacco use among adults was smoking manufactured cigarettes (22.2% of the population). These indicators would be useful as a national baseline to monitor progress toward a voluntary target of a 30% relative reduction in the prevalence of current tobacco use in persons aged ≥15 years by 2025. The GATS national data provides useful information for policy making and measuring progress in tobacco control.

Effective monitoring of tobacco use requires the implementation of the following key strategies:

- Regular surveys in accordance with the GTSS as a tool for sustainable monitoring of tobacco use, and the integration of these surveys into national health behavior surveys established by the Ministry of Healthcare and Social Development for surveillance and monitoring of the prevalence of behavioral risk factors and lifestyle for the years 2016-2020.
- Implementation of the integrated approach in providing surveillance and monitoring of the key behavioral risk factors for tobacco use, taking into account international approaches and technologies for their implementation.
- The use of comprehensive indicators of tobacco use, exposure to secondhand smoke, cessation, economic indicators, and population knowledge, attitudes, and perceptions for the development of strategic programs and measures to reduce and control tobacco use, thereby increasing the effectiveness of awareness campaigns and measures to control tobacco use through legislation.
- Ensuring the exchange of information with national and international institutions that provide technical and financial support to the regular surveys in GTSS.

**Protect – WHO FCTC: Article 8 "Protection from exposure to tobacco smoke"**

Secondhand smoke causes disease in nonsmokers. In Kazakhstan, 74.0% of the adult population believed that exposure to tobacco smoke causes severe illness in nonsmokers, but only 57.3% of current smokers had such a belief. According to the law in the Republic of Kazakhstan, smoking is prohibited in educational establishments, health care facilities, eating places for the general public, public transport, and public venues for leisure activities, including nightclubs and discotheques, as well as in workplaces, with the exception of specially equipped smokers' areas. The GATS found that 19.0% (24.7% of men and 12.9% of women) of those who worked indoors were exposed to tobacco smoke at indoor workplaces. An estimated 27.6% of the adult population was exposed to secondhand smoke when visiting restaurants and 70.4% when visiting bars or nightclubs. Just under one-fifth ( 18.1%) of adults were exposed to secondhand smoke using public transport, 9.7% while visiting health care facilities, 7.8 % at schools, and 24.1% at universities. In many of these facilities the protection from tobacco smoke should be up to 100%. Just over three-fourths (77.2%) of adults supported a law completely prohibiting smoking in all indoor workplaces and indoor public places. People could be protected from tobacco smoke through the following strategies:

- Legislation that includes 100% smoke-free places is in line with the WHO FCTC and its guidelines, as partial bans have limited effect on the health of people who are forced to inhale secondhand smoke and are hard to enforce.
- Measures and mechanisms for the implementation and enforcement of existing smoke-free policies.
- Media campaigns that are regular and systematic increases social awareness of the harms of tobacco use and exposure to tobacco smoke.

**Offer - WHO FCTC: Article 14 "Demand reduction measures concerning tobacco dependence and cessation"**

The GATS found that current smokers in Kazakhstan smoked an average of 14.9 cigarettes per day (men, 15.2; women, 11.8), and that 50.9% of current daily smokers (51.6% of men and 43.8% of women) demonstrated a high level of nicotine dependence by using tobacco within 30 minutes after awakening. Well over half (63.9%) of current smokers were interested in quitting smoking, and 29.5% of past-year smokers (current smokers plus those who had been abstinent for less than 12 months) had made an attempt to quit smoking in the past 12 months, of whom 76.5% had tried to quit without any assistance. Only 12.9% of adults who were ever daily smokers had become nonsmokers. Among past-year smokers who had visited a health care provider in the past 12 months, 46.6% were advised to quit when visiting that provider. Thus, adults who are cigarette smokers or who use smokeless tobacco could benefit from following forms of assistance for smoking cessation:

- Primary health care providers (general practitioners, internists, pediatricians, specialized care workers, nurses, social workers, and psychologists) could make a daily practice of providing short counseling/advice on the dangers of smoking, with the obligatory introduction of data on smoking and counseling provided in the medical records.
- A national toll-free telephone hotline for counseling on tobacco cessation is an effective strategy to help smokers that wish to quit.
- The list of primary health care services in the republic could include smoking cessation services, including appropriate budgeting and financial incentives to primary health care providers to deliver such services.
- Access to trained health workers, in particular nurses and primary health care physicians, social workers, and psychologists, on the skills needed to counsel patients

on tobacco cessation.

- Access to nicotine replacement therapy and other pharmacological agents used for smoking cessation.

**Warning - WHO FCTC: Article 11 "Packaging and labeling of tobacco products"**

In 2011, the Republic of Kazakhstan introduced the application of strong pictorial warning labels on packages of cigarettes, with implementation scheduled for April 2013. This new measure of tobacco control has already shown its effectiveness. According to the 2014 GATS, 98% of cigarette smokers had noticed pictorial health warnings on cigarette packs, and 58.0% of current smokers had thought about quitting because of the pictograms. It should be noted that these percentages are much higher than those for two other countries surveyed using GATS (Poland, 2009, at 17.7%, and Russian Federation, 2009, 31.7%), but not much higher than Turkey in 2008 (46.3%). However, only 73.0% of current smokers believed that smoking causes serious illness, and just 57.3% believed that secondhand smoke is harmful to health. Moreover, almost one-third (32.1%) of current smokers believed that certain types of cigarettes can cause less harm than others. Effective measures to educate the public include the following:

- Pictorial warnings of the health risks for all types of tobacco products—both smoking and smokeless tobacco.
- Rotation of current pictorial warnings on tobacco packages.
- Larger picture warnings, covering a minimum of 65% of the tobacco package front and back to ensure their high effectiveness.
- Consider plain packaging such as no colors, logos, or design elements.
- Dissemination of information on the health effects of smoking, the use of smokeless tobacco, and exposure to secondhand smoke, as well as information on the economic impact of tobacco use and exposure to secondhand smoke, through continuous media campaigns over a longer period of time.

**Enforce — WHO FCTC: Article 13 "Tobacco advertising, promotion and sponsorship"**

Despite the current ban on all types of tobacco advertising in Kazakhstan, 25.7% of the adult population noticed advertising, sponsorship, or sales promotion of cigarettes, while 14.0% of adults noticed the presence of cigarette advertising in stores, 2.6% noticed it on television, 2.8% on billboards, and 7.0% on the Internet. Overall, 83.9% of adults in Kazakhstan were in favor of a total ban on tobacco advertising. A ban on advertising, sales promotion, and sponsorship of tobacco products could be enforced by the following measures:

- Revision of existing enforcement mechanisms prohibiting tobacco advertising.
- Expansion of tobacco advertising and promotion prohibitions to include all tobacco products, as well as sponsorship by tobacco industry of various events, including charity events, in accordance with the WHO FCTC and its guidelines.
- Increased social awareness of the dangers of tobacco use and tobacco promotion.
- Engagement of cross-sectoral and inter-agency cooperation with governmental and nongovernmental organizations (NGOs) for tobacco control at all levels, especially for systematic monitoring of advertising by the tobacco industry and its overall strategies.

**Raise — WHO FCTC: Article 6 "Price and tax measures to reduce the demand for tobacco"**

In Kazakhstan, current smokers were found to spend an average of 4,244.5 tenge per month on manufactured cigarettes. The average amount spent on a pack of 20 manufactured cigarettes was 221.4 tenge, a sum less than the cost of 1 liter of pasteurized milk. These facts demonstrate that cigarettes are largely available and affordable to people in Kazakhstan. Increasing the price of tobacco products by increasing the excise tax is one of the most effective ways to prevent smoking by youth, reduce tobacco use generally, and save lives. Also, regular increases in tax and prices for cigarettes have been proven beneficial for the country's economy through the additional tax revenues provided. According to GATS Kazakhstan 2014, a tax increase on tobacco products was supported by 65.2% of adults. Increasing taxes and prices on tobacco is one of the most cost-effective interventions to reduce tobacco consumption. Effective price tax measures could include:

- Continuing regular tax increases on all tobacco products can discourage young people from initiating smoking, and can increase government revenues.
- Education about the importance of raising the price of tobacco products, including routine increases to adjust to inflation and affordability, in accordance with the WHO FCTC and its guidelines.
- Enhancement of stakeholder cooperation to regularly increase the price of all tobacco products, including smokeless tobacco and imported cigarettes.

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## Appendix A: Glossary of Terms

| Terminology for the Questionnaire and Results | |
|---|---|
| Believing thattobacco smoking is dangerous | Believing that tobacco smoking causes serious illness and specific diseases, e.g., stroke, heart attack, lung cancer, bronchitis, and stomach ulcers. |
| Current user of smokeless tobacco | A person who currently uses any smokeless tobacco product, either daily or occasionally. |
| Current tobacco smoker | A person who currently smokes any tobacco product, either daily or occasionally. |
| Daily smoker | A person who currently smokes any tobacco product every day. |
| Daily user of smokeless tobacco | A person who currently uses any smokeless tobacco product every day. |
| Ever daily smoker | This person may or may not be a current smoker. Includes 'current daily smokers', 'current occasional smokers, formerly daily',and 'current nonsmokers, formerly daily smokers'. |
| Exposure to antitobacco information | A term used to determine whether adults have noticed any information about the dangers of cigarettes or smokeless tobacco, or that encourages quitting the use of these products, in the last 30 days, in the locations of interest: newspapers/ magazines, television, radio, billboards, public transportation, stores,or elsewhere. |
| Exposure to secondhand smoke at home | Exposure was determined indirectly by using the reports of respondents on smoking in the home (daily, weekly, or monthly) in the past 30 days. This does not include outside areas such as patios, balconies, gardens, etc. that are not fully enclosed. |

| | |
|---|---|
| Exposure to secondhand smoke in public places | Refers to adults who were exposed to smoking inside the public places of interest in the past 30 days:<br>Government buildings: These include indoor are as that aredesignated as nonsmoking by the national smoke-free laws.<br>Private workplaces.<br>Health-care facilities: This covers the indoor areas of both public and private health-care facilities, which are nonsmoking areas per the national smoke-free laws.<br>Schools.<br>Colleges/universities.<br>Restaurants: Covers places for selling food or beverages inside the building, not including places in front of any building or by the wayside.<br>Bars/nightclubs.<br>Cafes/cafeterias.<br>Public transportation: Includes all public transport, air-conditioned or not. |
| Exposure to secondhand smoke at the workplace | Refers to adults exposed to smoking at work inside a building in the past 30 days, which was determined by respondents' reports of someone smoking there. Estimates were developed for adults who worked outside their own homes either indoors only or both indoors and outdoors. |
| Exposure to tobacco advertisement, sponsorship, and promotion | This category has several components, all of which refer to the last 30 days:(a) Noticing any advertisements or signs promoting cigarettes or nonsmoking tobacco in an area of interest: stores where the products are sold, television, radio, billboards, newspapers/magazines, in cinemas, on the Internet, on public transportation vehicles or stations, or elsewhere. (b) Noticing any sport or sporting event associated with either cigarette brands/companies or smokeless brands/companies. (c) Noticing any free samples of either cigarettes or smokeless tobacco, sales prices, coupons, free gifts/discounts on other products, clothing/other items with a brand name or logo of either cigarettes or smokeless tobacco imprinted on them, and mail promoting cigarettes. |

| | |
|---|---|
| Former daily smoker | A person who is currently a nonsmoker but who previously smoked daily for 1 month or longer. |
| Former daily user of smokeless tobacco | A person who currently does not use smokeless tobacco products but had previously used such products daily for1 month or longer. |
| Health-care provider | This includes persons in various health professions, such as medical doctors, nurses, pharmacist, health professionals, and others. |
| Interested in quitting the use of smokeless tobacco | This describes current users of smokeless tobacco who are planning or thinking about quitting the use of this product within the next month, 12 months, or someday. |
| Interested in quitting smoking | This describes current tobacco smokers who are planning or thinking about quitting smoking within the next month, 12 months, or someday. |
| Nonmedication therapy | Includes acupuncture or reflexology. |
| Nonsmoker | A person who currently does not smoke at all. |
| Nonuser of smokeless tobacco | A person who currently does not use smokeless tobacco at all. |
| Occasional smoker | A person who smokes currently but less than daily. |
| Occasional user of smokeless tobacco | A person who currently uses a smokeless tobacco product but less than daily. |
| Hand-rolled cigarettes | These cigarettes, which are normally produced by the smokers themselves,are made of thinly sliced loose tobacco and cigarettes or cigarette paper, sometimes using a special seaming machine. |
| Pharmacotherapy | This includes nicotine replacement therapy and prescription medications (such as Tabex). |
| Psychotherapy | This includes coding or hypnosis. |
| Public places | These places includes government buildings, health-care facilities, restaurants, bars/nightclubs, cafes/cafeterias, public transportation, schools, colleges/universities, and private workplaces. |
| Quit attempt | This term refers to an attempt by current tobacco smokers or users of smokeless tobacco to quit during the past 12 months. It also refers to former tobacco smokers and smokeless tobacco users who have been abstinent for <12 months (i.e., they are attempting to quit). |
| Secondhand smoke | This refers to the inhalation of smoke from tobacco products used by others. |

| | |
|---|---|
| Smokeless tobacco use status | Here there are three categories:<br>1) 'Current/daily smokeless user' means the person has been using at least one smokeless tobacco product every day over a period of 1 month or longer.<br>2) 'Current/occasional smokeless user' means the person uses smokeless tobacco products less than daily (may have been formerly daily or never daily).<br>3) 'Non-smokeless tobacco user' means the person currently does not use smokeless tobacco at all. This category includes both 'former daily user' and 'never daily user'. |
| Smoking status /smoking frequency | Here there are alsothree categories:<br>1) 'Current/daily smoker' means the person has been smoking at least one tobacco producte very day over a period of 1 month or longer.<br>2) 'Current/occasional smoker' means the person currently smokes less than daily (eitherformerly daily or never daily).<br>3) 'Nonsmoker' means the person currently does not smoke at all. This includes 'Former daily smoker' (currently a nonsmoker but had previously smoked daily) and 'Never daily smoker' (currently a nonsmoker and has never smoked daily, but instead was formerly an occasional or never smoker). |
| Tobacco products | Here there are two categories:<br>1) Smoked tobacco includes manufactured cigarettes, hand-rolled cigarettes, pipes full of tobacco, cigars/cheroots/cigarillos, waterpipes (shisha/hookah), and anyother reported smoked tobacco products.<br>2) Smokeless tobacco includes snus (oral tobacco), snuffing tobacco (for nasal use), chewing tobacco (oral tobacco for chewing), and any other reported smokeless tobacco products. |

# Appendix B. Sample Design

## First-Stage Sampling of Settlements

The sample of 160 settlements (give definition here) used in GATS was chosen from a national listing of settlements maintained by the republic's Agency on Statistics. This frame includes for each settlement an urban/rural indicator (no settlementsn were partially urban or partially rural) and a current count of the number of households listed there in a continuously updated national registry of households, which was also used as the sampling frame for selection of households in the second stage. There are 8,835 settlements in the national listing, but this number is reduced to 4,892 when rural and more remote settlements with fewer than 50 households (accounting for 1.1% of all households in the country) are excluded. To be consistent with other surveys conducted by the Agency on Statistics, the sample for GATS was selected from the list of settlements with 50 households or more.

After the settlement frame was initially stratified,the PSU (primary sampling unit) sample size of 160 was disproportionately allocated among the 30 strata formed jointly by classification into oblasts and urban/rural areas. The definitions of these strata and their unique stratum identifiers are presented in Table B1.Twenty-eight of these strata are defined there as the urban and rural settlements in 14 oblasts, with the tables showing 2more urban strata for the cities of Astana and Almaty. Stratification by oblast was performed to assure a broad geographic representation of sample households, and stratification by urban/rural classification was done to improve the precision of national estimates and to enhance the statistical quality of national urban: rural comparisons. An equal (or 50:50) allocation of sample PSUs by urban/rural status, along with proportionate allocation among oblasts within the urban/rural categories, was done to address the need for both national estimates and urban:rural comparisons in the data analysis. Because roughly 35-40% of the population of Kazakhstan lives in rural areas, this means that the GATS oversampled those living in rural areas and that this disproportionality had to be accommodated through the appropriate computation and use of sample weights. Counts of the total number of settlements and the PSU sample sizes and sampling rates are also presented in **Table B1**.

The decision on how to select PSUs in urban strata was complicated by the relatively small number of large settlements, and thus relatively large PSU sampling rates, in the 16 urban strata. Also, because of the wide variation in settlement size, probability proportional to size (PPS) selection of settlements was needed. Furthermore, to deal with the required large PSU stratum sampling rates (many approaching or exceeding 100%) and to simplify accommodation to the design in analysis, it was decided to select settlements in all 16 urban strata using PPS with replacement (PPSWR). Moreover, because rural PSU stratum sampling rates were mostly 1-2%, with none exceeding 4%, it was decided that PPS without replacement (PPSWOR) of rural settlements would be of little added statistical benefit compared to PPSWR.Thus, PPSWR was used for selection of PSUs in all 14 rural strata.

## Second-Stage Sampling of Household Entries in the Housing Registry

As previously noted, the frames of households for separate second-stage sample selection were obtained from the Housing Registry, which is a credible and continuously updated national registry of residential household addresses in Kazakhstan. The existence and accessibility of this registry made the creation of a costly household listing for GATS unnecessary. Entries in this registry, which are maintained in computer files by the Agency on Statistics, include the following relevant items for sampling purposes: (i) a unique household identifier, and (ii) specific information to enable field staff to find selected entries, including the following pieces of information: a unique household listing identifier, a household address with a street name and building number, a flat identifier (in apartment buildings), and placement identifiers indicating the oblast, district, and settlement in which the household is located.

A household entry on the Housing Registry is defined as an economic entity consisting of one or more individuals living together who combine completely or partially their incomes and property and who jointly consume goods and services, which is consistent with the GATS definition of a household. Specifically excluded from the registry and GATS are hostels, boarding schools, orphanages, nursing homes, summer houses (dachas), hospitals, prisons, hotels, military barracks, motels, rest houses, places for sports and tourism, resorts, and other buildings and facilities designed for rest and temporary living.

The Housing Registry is updated continuously in the larger cities and more accessible areas, while in more remote areas the update is periodic (e.g., every 1to 3 months) rather than continuous. Updates to the registry are made based on information of housing changes obtained from various sources, including systems to record the demolition of households and new construction or to log real estate transactions involving a change of occupants at individual addresses. At the same time that updates are made to the registry, counts of household entries are

updated for other data bases, such as the national file of settlements.

A separate (i.e., statistically independent) without-replacement simple random sample of households was selected within each of the 160 sample settlements.The number of household entries selected in each settlement was the same for all settlements within each stratum, but it varied somewhat among strata because of rounding in allocating the 160 settlements among strata. In all, 4,611 household listings were selected through the second stage of selection, from which it was expected that 4,000 completed GATS interviews would be obtained. The number of selected household listings to be chosen was determined by considering experience with attrition in prior surveys in Kazakhstan while also considering how the GATS situation with respect to recruiting samples might differ from sampling experiences elsewhere.

## Third-Stage Random Selection of One Resident per Household Entry

In the third stage of sampling, selected households were contacted and then asked to complete a roster of GATS-eligible persons in the household. Once the roster was completed, the handheld computer to be used to complete the survey interview was programmed to randomly choose one of the household's eligible residents. Thus, individual household residents were the sampling units in the third stage of sampling.

The only exception to this approach would occur in those rare instances when multiple families/households lived at the selected address. If that number was below a threshold count, all the eligible persons in all of the families/households at that address would be listed and one selected at random. If, however, the number of families/households at the address exceeded the threshold, which was set at five, there would still be random selection, but from a smaller number of families/households, i.e., just five. The selected household would be approached, its eligible residents listed, and one of them chosen at random. It should be noted that this remedy added another stage to sampling for the finally selected family/household, and thus it added another stage-specific selection probability to be computed and used for the sample weights computed after data collection.

A tabular summary of the three-stage sample for GATS Kazakhstan, 2014can be viewed in **Table B2**.

In Kazakhstan GATS 2014, the size of the PSUs (number of households) ranged widely, from 179 to 128,646 people. As indicated above, we decided to use the 4,892 settlements that had 50 households or more. As previously explained, 30 were formed jointly by the combination of urban/rural status and oblast. In all, 160 PSUs were selected using PPS with replacement to the number of households in each stratum size, with equal allocation of PSU numbers by urban/rural status (80 each). It is possible that one settlement was selected more than once, especially when the settlements werevery large. If a settlement was selected twice it became two PSUs.

**Calculations of Base Weights:** Because the sample was disproportionatelydistributed in different layers, sampling weights were employed to ensure its real representation at the national level as well as at the level of urban and rural places of residence. The creation of weights had three phases: 1) basic weight; 2) adjustment for nonresponse; and 3) calibration.

The basic base weight components for Kazakhstan GATS 2014 were p1, which equaled the probability of selecting a settlement within a stratum; p2, which equaled the selection probability of the households within a settlement; and p3, which equaled the selection probability of an individual within each household. Both p1 and p2 were obtained using SAS PROC SURVEYSELECT, while P3 was given by dividing by the number of eligible persons in the household). That number was obtained from the survey response data. The overall base weight (*wb*) was calculated as 1/(p1*p2*p3). The household-level base weight (*wb_hh*) for use in adjustments was calculated as 1/(p1*p2).

| *Caseid* | *STRATA* | *PSU* | *P1* | *P2* | *P3* | *wb_hh* | *wb* |
|---|---|---|---|---|---|---|---|
| 811080 | 231 | 23362010011 | 0.27388 | 0.00276 | 0.5 | 1324.21 | 2648.41 |
| 826880 | 511 | 51101310011 | 1.59614 | 0.00048 | 0.5 | 1319.75 | 2639.49 |
| 831340 | 511 | 51542010011 | 0.27968 | 0.00271 | 0.5 | 1319.75 | 2639.49 |
| 832830 | 551 | 55101000011 | 3.08689 | 0.00024 | 0.5 | 1339.41 | 2678.83 |
| 843850 | 751 | 75131000011 | 3.13011 | 0.00024 | 0.2 | 1341.43 | 6707.16 |

b) Adjustment for nonresponse: Adjustments for nonresponse were made at both the household and respondent levels. Because the adjustment for nonresponse at the household level was calculated by PSU, there were 160 adjustment cells – 1 for each of the valid PSUs. This adjustment was calculated as follows:

$$hh\_nr = \frac{\sum wb\_hh_{eligible\ households}}{\sum wb\_hh_{completed\ rosters}}$$

| *Caseid* | PSU | *∑wb_hheligible* | *∑wb_hhcompleted* | *hh_nr* |
|---|---|---|---|---|
| 811080 | 23362010011 | 45023 | 45023 | 1 |
| 826880 | 51101310011 | 36952.9 | 36952.9 | 1 |
| 831340 | 51542010011 | 36952.9 | 36952.9 | 1 |
| 832830 | 55101000011 | 37503.6 | 36164.2 | 1.03704 |
| 843850 | 75131000011 | 38901.5 | 37560.1 | 1.03571 |

The adjustment for nonresponse at the level of the respondent (person) was calculated by residence (urban/rural), gender, and age group, and thus there were 2*2*4=16 adjustment cells for this adjustment. The formula for this adjustment was as follows:

$$pp\_nr = \frac{\sum wb_{eligible\ households}}{\sum wb_{completed\ rosters}}$$

| *Caseid* | Residence | Gender | Age groups | *∑wb_eligible* | *∑wb_completed* | pp_nr |
|---|---|---|---|---|---|---|
| 811080 | 1 | 1 | 2 | 1671160.67 | 1649828.67 | 1.01293 |
| 803460 | 1 | 1 | 2 | 1671160.67 | 1649828.67 | 1.01293 |
| 836430 | 2 | 1 | 3 | 222226.87 | 218629.98 | 1.01645 |
| 841430 | 2 | 2 | 4 | 283775.40 | 283047.65 | 1.00257 |

A final adjusted weight for nonresponse was calculated as the product of the base weight (wb), the adjusted household nonresponse (hh_nr), and the adjustment for person non-response (pp_nr).

c) Calibration: The post-stratification adjustment (r) was calculated by residence (urban/rural), gender, and the four standard GATS age groups (15-24, 25-44, 45-64 and 65+ years), resulting in 16 adjustment cells. Population counts were provided by the Kazakhstan Agency on Statisticsthat were obtained using data for house registration. The post-stratification adjustment was calculated as follows:

$$r = \frac{popproj}{\sum wb\_hh\_pp}$$

| Residence | Gender | Agegrp4 | POP | wr_hh_pp_sum | r |
|---|---|---|---|---|---|
| 1 | 1 | 2 | 1395842 | 1734247.27 | 0.80487 |
| 1 | 1 | 3 | 860355 | 835696.55 | 1.02951 |
| 2 | 1 | 2 | 1116929 | 941496.72 | 1.18633 |
| 2 | 2 | 3 | 784189 | 799492.97 | 0.98086 |

The final weight (wf) in the process was the product of the nonresponse adjusted weight (wr_hh_pp) and the post-stratification adjustment (r).

Checklist of Quality Assurance (QA) Measures for Producing Sample Weights

The QA measures for weighting shown below were included in the attached Excel file. (Numerical headings refer to the related section in the GATS QA Manual.)

5.2.1 Pattern of post-stratification adjustments among adjustment cells

5.2.2 Multiplicative effect of variable sample weights reported overall and by urban/rural

5.2.3 Overall design effect on the precision of survey estimates and the within-PSU rho

5.2.4 Margin of error

5.3.3 Patterns of household nonresponse adjustments by PSU

5.3.4 Patterns of person-level response rates by adjustment cell

5.3.5 Patterns of person-level refusal rates by adjustment cell

5.3.6 Item nonresponse rates

5.4. Additional computational checks were employed to check whether the following statements were true:

A. Average of base weights divided by average size of nonresponse-adjusted weights was roughly equal to the overall person-level response rate.

B. Weighted distribution of final weights among all calibration cells matched the external population counts used for calibration.

C. Sum of the final weights equaled the total size of the population count used for calibration.

D. Most of the post-stratification adjustments were close to 1.00.

E. Meff was less than or equal to 2.00.

## Table B1. Sample Design for GATS Kazakhstan, 2014, with Selected Data.

| Oblast | Stratum code | | Number of households | | Roster | Sample size of PSU | | | Sampling rate, % | | Sampling cluster size | | Base weight | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rural | Urban | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban | Rural | Urban | Rural | Urban |
| Akmola (11) | 112 | 111 | 115,273 | 130,563 | 245,836 | 6 | 3 | 9 | 1.3% | 20.0% | 27 | 33 | 711.5617 | 1318.8182 |
| Aktobe (15) | 152 | 151 | 62,826 | 147,194 | 210,020 | 3 | 4 | 7 | 1.2% | 50.0% | 29 | 28 | 722.1379 | 1314 |
| Almaty (19) | 192 | 191 | 289,800 | 127,779 | 417,579 | 14 | 3 | 17 | 2.4% | 30.0% | 29 | 32 | 713.7931 | 1331.0313 |
| Atyrau (23) | 232 | 231 | 53,699 | 90,046 | 143,745 | 3 | 2 | 5 | 2.5% | 66.7% | 25 | 34 | 715.9867 | 1324.2059 |
| West-Kazakhstan (27) | 272 | 271 | 75,081 | 111,487 | 186,568 | 4 | 3 | 7 | 1.4% | 50.0% | 26 | 28 | 721.9327 | 1327.2262 |
| Jambyl (31) | 312 | 311 | 111,651 | 128,602 | 240,253 | 5 | 3 | 8 | 1.7% | 75.0% | 31 | 32 | 720.3290 | 1339.6042 |
| Karaganda (35) | 352 | 351 | 74,865 | 398,805 | 473,670 | 4 | 10 | 14 | 1.5% | 45.5% | 26 | 30 | 719.8558 | 1329.3500 |
| Kostanai (39) | 392 | 391 | 120,836 | 193,160 | 303,996 | 6 | 5 | 11 | 1.5% | 62.5% | 28 | 28 | 719.2619 | 1308.2857 |
| Kyzylorda (43) | 432 | 431 | 73,977 | 63,472 | 137,449 | 4 | 2 | 6 | 2.3% | 40.0% | 26 | 24 | 711.3173 | 1322.3333 |
| Mangistau (47) | 472 | 471 | 44,280 | 74,437 | 118,717 | 2 | 2 | 4 | 4.0% | 66.7% | 31 | 28 | 714.1935 | 1329.2321 |
| South-Kazakhstan (51) | 512 | 511 | 274,870 | 295,623 | 570,493 | 13 | 8 | 21 | 1.8% | 80.0% | 29 | 28 | 729.0981 | 1319.7455 |
| Pavlodar (55) | 552 | 551 | 63,491 | 194,215 | 257,706 | 3 | 5 | 8 | 1.2% | 71.4 | 29 | 29 | 729.7816 | 1339.4138 |
| North-Kazakhstan (59) | 592 | 591 | 109,707 | 105,235 | 214,942 | 5 | 3 | 8 | 1.1% | 60.0% | 31 | 26 | 707.7871 | 1349.1667 |
| East-Kazakhstan (63) | 632 | 631 | 163,017 | 310,335 | 473,352 | 8 | 8 | 16 | 1.5% | 61.5% | 28 | 29 | 727.7545 | 1337.6509 |
| Astana city (71) | - | 711 | - | 248,886 | 248,886 | - | 6 | 6 | - | 200.0% | - | 31 | - | 1338.0968 |
| Almaty city (75) | - | 751 | - | 505,720 | 505,720 | - | 13 | 13 | - | 185.7% | - | 29 | - | 1341.4324 |
| TOTAL | | | 1,633,373 | 3,115,559 | 4,748,932 | 80 | 80 | 160 | | | | | | |

**PSU:primary sampling unit.**

## Table B2. GATS Kazakhstan Summary Table

**Target group for the survey =** civilian, noninstitutionalized population of persons aged 15 years or older in the Republic of Kazakhstan, except for persons living in settlements with fewer than 50 households[5]

| Level | Sampling unit and source | Stratification | Sampling | Sample size |
|---|---|---|---|---|
| 1 | **Primary sampling unit (PSU):** settlement<br><br>**Frame:** Case file of 4,892 settlements in which there were at least 50 settlements.In all, 1.1% households in the target group were excluded because they were in remote areas. | • 30 strata formed by urban/rural classification of 14 oblasts with urban and rural population, and 2 fully urban oblasts (i.e., cities of Astana and Almaty)<br>• Equal distribution of PSU sample by urban/rural classification; proportional by oblasts within urban/rural category | • Probability proportional to size with replacement<br>  • Mos = total number of household addresses in Housing Registry | • 160 settlements selected |
| 2 | **Secondary sampling unit (SSU)**: household address<br><br>Frame: Current roster of household addresses from Housing Registry of the Agency on Statistics | • Not envisaged | • Simple random sampling without replacement | • 4,611 households selected<br>• 24-34 of 80 settlements /urban and 25-31 of 80 settlements/rural |
| 3 | **Final sampling Unit:**one eligible resident<br><br>Frame: Roster of all eligible residents (from the oldest to the youngest) in a family; similarly if multiple families live in the same household | • Not envisaged | • Standard random selection of one person from the roster | • One resident from an interviewed household |

[5]"Civilian" means that a military person living at a military base would be excluded, but those living outside the base would be counted. "Noninstitutionalized" meansapersonnot residing within aninstitution (e.g., hospital, elderly house, prison).

# Appendix C. Estimates of Sampling Errors

**Table C1:Sampling Errors for National Sample, GATS Kazakhstan, 2014.**

| | | | | | | | Confidence Limits | |
|---|---|---|---|---|---|---|---|---|
| Indicator | Estimate ( R ) | Standard error (SE) | Sample size (n) | Design effect (DEFF) | Relative error (SE/R) | Margin of error (MOE) | Lower limit (R-1.96SE) | Upper limit (R+1.96SE) |
| Current tobacco users | 0.229 | 0.009 | 4 420 | 1.992 | 0.039 | 0.017 | 0.212 | 0.247 |
| Current tobacco smokers | 0.224 | 0.009 | 4 425 | 2.033 | 0.040 | 0.018 | 0.206 | 0.241 |
| Current cigarette smokers | 0.222 | 0.009 | 4 425 | 2.014 | 0.040 | 0.017 | 0.204 | 0.239 |
| Current users of smokeless tobacco | 0.013 | 0.002 | 4 408 | 1.557 | 0.162 | 0.004 | 0.009 | 0.017 |
| Daily tobacco smokers | 0.191 | 0.008 | 4 425 | 1.908 | 0.043 | 0.016 | 0.175 | 0.207 |
| Daily cigarette smokers | 0.187 | 0.008 | 4 425 | 1.999 | 0.044 | 0.016 | 0.171 | 0.203 |
| Daily users ofsmokeless tobacco | 0.004 | 0.001 | 4 408 | 1.342 | 0.260 | 0.002 | 0.002 | 0.007 |
| Former daily tobacco smokers, among all adults | 0.031 | 0.003 | 4 425 | 0.945 | 0.081 | 0.005 | 0.026 | 0.036 |
| Former tobacco smokers, among ever daily smokers | 0.129 | 0.011 | 1 122 | 1.149 | 0.083 | 0.021 | 0.108 | 0.150 |
| Time to first smoke within 5 minutes of waking up | 0.122 | 0.013 | 863 | 1.420 | 0.109 | 0.026 | 0.096 | 0.148 |
| Time to first smoke within 6-30 minutes of waking up | 0.387 | 0.022 | 863 | 1.687 | 0.056 | 0.042 | 0.345 | 0.430 |
| Made an attempt to quit smoking in the past 12 months | 0.295 | 0.017 | 1 034 | 1.400 | 0.057 | 0.033 | 0.262 | 0.328 |
| Health care provider asked about smoking | 0.590 | 0.031 | 356 | 1.407 | 0.052 | 0.061 | 0.530 | 0.651 |
| Health care provider advised quitting smoking | 0.466 | 0.033 | 353 | 1.507 | 0.070 | 0.064 | 0.402 | 0.530 |
| Use of pharmacotherapy for smoking cessation | 0.234 | 0.030 | 290 | 1.477 | 0.129 | 0.059 | 0.175 | 0.294 |
| Use of counseling/advicefor smoking cessation | 0.102 | 0.025 | 294 | 2.026 | 0.246 | 0.049 | 0.053 | 0.152 |
| Planning to quit, thinking about quitting, or will quit smoking | 0.639 | 0.020 | 998 | 1.649 | 0.031 | 0.038 | 0.600 | 0.677 |
| Exposure to secondhand smoke at home | 0.138 | 0.010 | 4 159 | 3.574 | 0.073 | 0.020 | 0.119 | 0.158 |
| Exposure to secondhand smoke at workplace | 0.190 | 0.017 | 2 108 | 3.756 | 0.087 | 0.032 | 0.158 | 0.223 |
| Exposure to secondhand smoke in government buildings/offices | 0.041 | 0.005 | 4 334 | 3.213 | 0.132 | 0.011 | 0.030 | 0.052 |
| Exposure to secondhand smoke in health care facilities | 0.039 | 0.007 | 4 350 | 5.510 | 0.177 | 0.013 | 0.025 | 0.052 |
| Exposure to secondhand smoke in restaurants | 0.095 | 0.010 | 4 360 | 5.249 | 0.107 | 0.020 | 0.075 | 0.115 |
| Exposure to secondhand smoke in public transportation | 0.101 | 0.009 | 4 385 | 3.540 | 0.085 | 0.017 | 0.084 | 0.118 |
| Last cigarette purchase in store | 0.854 | 0.015 | 990 | 1.733 | 0.017 | 0.029 | 0.826 | 0.883 |
| Last cigarette purchase at kiosk | 0.038 | 0.009 | 993 | 2.394 | 0.247 | 0.018 | 0.020 | 0.056 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Noticed antitobacco information on radio or television | 0.346 | 0.016 | 4 388 | 4.983 | 0.046 | 0.031 | 0.315 | 0.378 |
| Noticed health warning labels on cigarette packages | 0.948 | 0.008 | 1 019 | 1.483 | 0.009 | 0.017 | 0.932 | 0.965 |
| Thinking of quitting because of health warning labels on cigarette package | 0.513 | 0.019 | 1 007 | 1.498 | 0.038 | 0.038 | 0.475 | 0.551 |
| Noticed any cigarette advertisement, marketing, or promotion | 0.257 | 0.017 | 4 336 | 6.426 | 0.066 | 0.033 | 0.224 | 0.290 |
| Noticed cigarette advertisementsin stores where cigarettes are sold | 0.140 | 0.014 | 4 397 | 7.568 | 0.103 | 0.028 | 0.112 | 0.168 |
| Believes that tobacco smoking causes serious illness | 0.849 | 0.010 | 4 414 | 3.306 | 0.012 | 0.019 | 0.830 | 0.868 |
| Believes that tobacco smoking causes strokes | 0.676 | 0.012 | 4 409 | 2.691 | 0.017 | 0.023 | 0.653 | 0.698 |
| Believes that tobacco smoking causes heart attacks | 0.672 | 0.013 | 4 404 | 3.274 | 0.019 | 0.025 | 0.647 | 0.697 |
| Believes that tobacco smoking causes lung cancer | 0.885 | 0.009 | 4 400 | 3.861 | 0.011 | 0.019 | 0.867 | 0.904 |
| Believes that using smokeless tobacco causes serious illness | 0.731 | 0.013 | 4 410 | 3.766 | 0.018 | 0.025 | 0.705 | 0.756 |
| Believes that secondhand smoke causes serious illness in nonsmokers | 0.740 | 0.015 | 4 420 | 4.859 | 0.020 | 0.029 | 0.711 | 0.768 |
| Number of cigarettes smoked per day (by daily smokers) | 14.944 | 0.405 | 859 | 1.958 | 0.027 | 0.793 | 14.151 | 15.737 |
| Years since quitting smoking | 10.300 | 0.957 | 164 | 1.417 | 0.093 | 1.877 | 8.424 | 12.177 |
| Monthly expenditures (in tenge) on manufactured cigarettes | 4, 244.452 | 249.392 | 921 | 1.434 | 0.059 | 488.809 | 3 755.643 | 4,733.261 |
| Age at initiation of daily smoking among adults aged 20-34 years | 18.610 | 0.200 | 323 | 1.491 | 0.011 | 0.392 | 18.218 | 19.002 |
| Average amount (in tenge) spent on 20 manufactured cigarettes | 221.448 | 11.593 | 921 | 1.055 | 0.052 | 22.722 | 198.726 | 244.170 |
| Average cost (in tenge) per 100 packs of manufactured cigarettes | 22, 144.824 | 1,159.285 | 921 | 1.055 | 0.052 | 2, 272.199 | 19, 872.625 | 24,417.023 |

**Table C2:Sampling Errors for Male Sample, GATS Kazakhstan, 2014.**

| | | | | | | | Confidence Limits | |
|---|---|---|---|---|---|---|---|---|
| Indicator | **Estimate ( R )** | **Standard error (SE)** | **Sample size (n)** | **Design effect (DEFF)** | **Relative error (SE/R)** | **Margin of error (MOE)** | **Lower limit (R-1.96SE)** | **Upper limit (R+1.96SE)** |
| Current tobacco users | 0.434 | 0.014 | 2 084 | 1.726 | 0.033 | 0.028 | 0.406 | 0.462 |
| Current tobacco smokers | 0.424 | 0.014 | 2 085 | 1.735 | 0.034 | 0.028 | 0.396 | 0.452 |
| Current cigarette smokers | 0.422 | 0.014 | 2 085 | 1.720 | 0.034 | 0.028 | 0.394 | 0.450 |
| Current users of smokeless tobacco | 0.028 | 0.005 | 2 077 | 1.552 | 0.161 | 0.009 | 0.019 | 0.037 |
| Daily tobacco smokers | 0.369 | 0.014 | 2 085 | 1.696 | 0.037 | 0.027 | 0.342 | 0.396 |
| Daily cigarette smokers | 0.363 | 0.014 | 2 085 | 1.807 | 0.039 | 0.028 | 0.335 | 0.391 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Daily users of smokeless tobacco | 0.009 | 0.002 | 2 077 | 1.380 | 0.264 | 0.005 | 0.005 | 0.014 |
| Former daily tobacco smokers,among all adults | 0.055 | 0.005 | 2 085 | 1.157 | 0.098 | 0.011 | 0.044 | 0.066 |
| Former tobacco smokers,among ever daily smokers | 0.120 | 0.012 | 1 008 | 1.288 | 0.097 | 0.023 | 0.097 | 0.142 |
| Time to first smoke within 5 minutes of waking up | 0.115 | 0.013 | 788 | 1.263 | 0.111 | 0.025 | 0.090 | 0.140 |
| Time to first smoke within 6-30 minutes of waking up | 0.401 | 0.021 | 788 | 1.504 | 0.053 | 0.042 | 0.359 | 0.443 |
| Made an attempt to quit smoking in the past 12 months | 0.289 | 0.018 | 925 | 1.380 | 0.061 | 0.034 | 0.255 | 0.324 |
| Health care provider asked about smoking | 0.620 | 0.032 | 306 | 1.290 | 0.051 | 0.062 | 0.559 | 0.682 |
| Health care provider advised quitting smoking | 0.498 | 0.037 | 303 | 1.617 | 0.073 | 0.072 | 0.426 | 0.569 |
| Use of pharmacotherapy for smoking cessation | 0.217 | 0.029 | 252 | 1.208 | 0.132 | 0.056 | 0.161 | 0.273 |
| Use of counseling/advice for smoking cessation | 0.093 | 0.024 | 256 | 1.813 | 0.264 | 0.048 | 0.045 | 0.140 |
| Planning to quit, thinking about quitting, or will quit smoking | 0.634 | 0.019 | 892 | 1.411 | 0.030 | 0.038 | 0.597 | 0.672 |
| Exposure to secondhand smoke at home | 0.167 | 0.013 | 1 919 | 2.173 | 0.075 | 0.025 | 0.142 | 0.192 |
| Exposure to secondhand smoke at workplace | 0.247 | 0.021 | 1 111 | 2.692 | 0.086 | 0.042 | 0.205 | 0.289 |
| Exposure to secondhand smoke in government buildings/offices | 0.050 | 0.008 | 2 032 | 2.657 | 0.157 | 0.015 | 0.035 | 0.066 |
| Exposure to secondhand smoke in health care facilities | 0.035 | 0.006 | 2 051 | 2.390 | 0.179 | 0.012 | 0.023 | 0.047 |
| Exposure to secondhand smoke in restaurants | 0.121 | 0.015 | 2 050 | 4.320 | 0.124 | 0.029 | 0.092 | 0.150 |
| Exposure to secondhand smoke in public transportation | 0.093 | 0.011 | 2 072 | 2.739 | 0.114 | 0.021 | 0.072 | 0.114 |
| Last cigarette purchase in store | 0.853 | 0.016 | 893 | 1.842 | 0.019 | 0.031 | 0.822 | 0.885 |
| Last cigarette purchase at kiosk | 0.039 | 0.010 | 896 | 2.389 | 0.258 | 0.019 | 0.019 | 0.058 |
| Noticed antitobacco information on radio or television | 0.327 | 0.017 | 2 074 | 2.838 | 0.053 | 0.034 | 0.293 | 0.361 |
| Noticed health warning labels on cigarette packages | 0.951 | 0.009 | 912 | 1.419 | 0.009 | 0.017 | 0.934 | 0.967 |
| Thinking of quitting because of health warning labels on cigarette package | 0.508 | 0.020 | 900 | 1.502 | 0.040 | 0.040 | 0.468 | 0.548 |
| Noticed any cigarette advertisement, marketing, or promotion | 0.262 | 0.020 | 2 038 | 4.229 | 0.076 | 0.039 | 0.223 | 0.301 |
| Noticed cigarette advertising in stores where cigarettes are sold | 0.146 | 0.017 | 2 071 | 4.769 | 0.116 | 0.033 | 0.113 | 0.180 |
| Believes that tobacco smoking causes serious illness | 0.791 | 0.014 | 2 079 | 2.578 | 0.018 | 0.028 | 0.762 | 0.819 |
| Believes that tobacco smoking causes strokes | 0.613 | 0.015 | 2 071 | 1.998 | 0.025 | 0.030 | 0.584 | 0.643 |
| Believes that tobacco smoking causes heart attacks | 0.602 | 0.016 | 2 068 | 2.122 | 0.026 | 0.031 | 0.571 | 0.632 |
| Believes that tobacco smoking causes lung cancer | 0.839 | 0.014 | 2 065 | 2.916 | 0.016 | 0.027 | 0.812 | 0.866 |
| Believes that using smokeless tobacco causes serious illness | 0.677 | 0.015 | 2 077 | 2.239 | 0.023 | 0.030 | 0.647 | 0.707 |
| Believes that secondhand smoke causes serious illness in nonsmokers | 0.656 | 0.019 | 2 082 | 3.260 | 0.029 | 0.037 | 0.619 | 0.693 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Number of cigarettes smoked per day (by daily smokers) | 15.233 | 0.405 | 785 | 1.847 | 0.027 | 0.794 | 14.439 | 16.027 |
| Years since quitting smoking | 11.282 | 1.032 | 140 | 1.251 | 0.091 | 2.022 | 9.261 | 13.304 |
| Monthly expenditures (in tenge) on manufactured cigarettes | 4 420.362 | 270.367 | 833 | 1.401 | 0.061 | 529.919 | 3 890.443 | 4 950.281 |
| Age at initiation of daily smoking among adults aged 20-34 years | 18.526 | 0.204 | 278 | 1.446 | 0.011 | 0.401 | 18.126 | 18.927 |
| Average amount (in tenge) spent on 20 manufactured cigarettes | 222.410 | 12.324 | 833 | 1.049 | 0.055 | 24.156 | 198.254 | 246.566 |
| Average cost (in tenge) per 100 packs of manufactured cigarettes | 22 241.015 | 1 232.446 | 833 | 1.049 | 0.055 | 2 415.595 | 19 825.420 | 24 656.610 |

**Table C3:Sampling Errors for Female Sample, GATS Kazakhstan, 2014.**

| | | | | | | | Confidence Limits | |
|---|---|---|---|---|---|---|---|---|
| Indicator | **Estimate ( R )** | **Standard error (SE)** | **Sample size (n)** | **Design effect (DEFF)** | **Relative error (SE/R)** | **Margin of error (MOE)** | **Lower lLimit (R-1.96SE)** | **Upper limit (R+1.96SE)** |
| Current tobacco users | 0.045 | 0.006 | 2 336 | 1.765 | 0.126 | 0.011 | 0.034 | 0.056 |
| Current tobacco smokers | 0.045 | 0.006 | 2 340 | 1.766 | 0.126 | 0.011 | 0.034 | 0.056 |
| Current cigarette smokers | 0.042 | 0.005 | 2 340 | 1.731 | 0.129 | 0.011 | 0.032 | 0.053 |
| Current users of smokeless tobacco | - | - | - | - | - | - | - | - |
| Daily tobacco Smokers | 0.032 | 0.005 | 2 340 | 1.691 | 0.149 | 0.009 | 0.022 | 0.041 |
| Daily cigarette smokers | 0.030 | 0.005 | 2 340 | 1.662 | 0.152 | 0.009 | 0.021 | 0.039 |
| Daily users ofsmokeless tobacco | - | - | - | - | - | - | - | - |
| Former daily tobacco smokers,among all adults | 0.010 | 0.002 | 2 340 | 1.445 | 0.247 | 0.005 | 0.005 | 0.015 |
| Former tobacco smokers,among ever daily smokers | 0.207 | 0.047 | 114 | 1.526 | 0.227 | 0.092 | 0.115 | 0.299 |
| Time to first smoke within 5 minutes of waking up | 0.193 | 0.066 | 75 | 2.065 | 0.341 | 0.129 | 0.064 | 0.323 |
| Time to first smoke within 6-30 minutes of waking up | 0.245 | 0.062 | 75 | 1.529 | 0.252 | 0.121 | 0.124 | 0.367 |
| Made an attempt to quit smokingin the past 12 months | 0.343 | 0.049 | 109 | 1.150 | 0.143 | 0.096 | 0.247 | 0.439 |
| Health care provider asked about smoking | 0.411 | 0.105 | 50 | 2.253 | 0.256 | 0.207 | 0.205 | 0.618 |
| Health care provider advised quitting smoking | 0.279 | 0.074 | 50 | 1.332 | 0.265 | 0.145 | 0.134 | 0.424 |
| Use of pharmacotherapy for smoking cessation | 0.357 | 0.102 | 38 | 1.691 | 0.287 | 0.201 | 0.156 | 0.557 |
| Use of counseling/advice for smoking cessation | 0.171 | 0.097 | 38 | 2.472 | 0.568 | 0.191 | -0.019 | 0.362 |
| Planning to quit, thinking about quitting, or will quit smoking | 0.674 | 0.064 | 106 | 1.929 | 0.094 | 0.125 | 0.550 | 0.799 |
| Exposure to secondhand smoke at home | 0.114 | 0.011 | 2 240 | 2.901 | 0.100 | 0.022 | 0.091 | 0.136 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Exposure to secondhand smoke at workplace | 0.129 | 0.019 | 997 | 3.051 | 0.144 | 0.036 | 0.093 | 0.166 |
| Exposure to secondhand smoke in government buildings/offices | 0.033 | 0.005 | 2 302 | 1.814 | 0.152 | 0.010 | 0.023 | 0.043 |
| Exposure to secondhand smoke in health care facilities | 0.042 | 0.009 | 2 299 | 4.803 | 0.217 | 0.018 | 0.024 | 0.060 |
| Exposure to secondhand smoke in restaurants | 0.071 | 0.009 | 2 310 | 2.745 | 0.125 | 0.017 | 0.054 | 0.088 |
| Exposure to secondhand smoke in public transportation | 0.108 | 0.011 | 2 313 | 2.801 | 0.100 | 0.021 | 0.087 | 0.129 |
| Last cigarette purchase in store | 0.863 | 0.034 | 97 | 0.964 | 0.040 | 0.067 | 0.796 | 0.931 |
| Last cigarette purchase at kiosk | 0.033 | 0.018 | 97 | 0.961 | 0.539 | 0.035 | -0.002 | 0.068 |
| Noticed antitobacco information on radio or television | 0.364 | 0.018 | 2 314 | 3.264 | 0.050 | 0.035 | 0.329 | 0.399 |
| Noticed health warning labels on cigarette packages | 0.928 | 0.026 | 107 | 1.073 | 0.028 | 0.051 | 0.878 | 0.979 |
| Thinking of quitting because of health warning labels on cigarette package | 0.555 | 0.052 | 107 | 1.153 | 0.093 | 0.102 | 0.453 | 0.656 |
| Noticed any cigarette advertisement, marketing,or promotion | 0.252 | 0.018 | 2 298 | 4.040 | 0.072 | 0.036 | 0.216 | 0.287 |
| Noticed cigarette advertisements in stores where cigarettes are sold | 0.134 | 0.015 | 2 326 | 4.396 | 0.110 | 0.029 | 0.105 | 0.163 |
| Believes that tobacco smoking causes serious illness | 0.901 | 0.009 | 2 335 | 2.052 | 0.010 | 0.017 | 0.883 | 0.918 |
| Believes that tobacco smoking causes strokes | 0.731 | 0.015 | 2 338 | 2.559 | 0.020 | 0.029 | 0.703 | 0.760 |
| Believes that tobacco smoking causes heart attacks | 0.735 | 0.016 | 2 336 | 3.067 | 0.022 | 0.031 | 0.703 | 0.766 |
| Believes that tobacco smoking causes lung cancer | 0.926 | 0.008 | 2 335 | 2.458 | 0.009 | 0.017 | 0.909 | 0.943 |
| Believes that using smokeless tobacco causes serious illness | 0.778 | 0.015 | 2 333 | 3.019 | 0.019 | 0.029 | 0.749 | 0.807 |
| Believes that secondhand smokes causes serious Illness in nonsmokers | 0.815 | 0.016 | 2 338 | 3.915 | 0.020 | 0.031 | 0.783 | 0.846 |
| Number of cigarettes smoked per day (by daily smokers) | 11.793 | 1.244 | 74 | 1.373 | 0.106 | 2.439 | 9.354 | 14.232 |
| Yearssince quitting smoking | 5.494 | 1.221 | 24 | 1.366 | 0.222 | 2.394 | 3.100 | 7.887 |
| Monthly expenditures (in tenge) on manufactured cigarettes | 2 602.593 | 288.654 | 88 | 1.632 | 0.111 | 565.763 | 2 036.830 | 3 168.356 |
| Age at initiation of daily smokingamong adults aged 20-34 years | 19.139 | 0.578 | 45 | 1.214 | 0.030 | 1.134 | 18.005 | 20.272 |
| Average amount (in tenge) spent on 20 manufactured cigarettes | 207.240 | 11.029 | 88 | 1.187 | 0.053 | 21.618 | 185.622 | 228.857 |
| Average cost (in tenge) per 100 packs of manufactured cigarettes | 20 723.971 | 1 102.935 | 88 | 1.187 | 0.053 | 2 161.753 | 18 562.218 | 22 885.724 |

**Table C4:Sampling Errors for Urban Sample, GATS Kazakhstan, 2014.**

| | | | | | | | Confidence Limits | |
|---|---|---|---|---|---|---|---|---|
| Indicator | **Estimate ( R )** | **Standard error** | **Sample size (n)** | **Design effect** | **Relative error** | **Margin of error** | **Lower limit** | **Upper limit** |

| | | (SE) | | (DEFF) | (SE/R) | (MOE) | (R-1.96SE) | (R+1.96SE) |
|---|---|---|---|---|---|---|---|---|
| Current tobacco users | 0.259 | 0.013 | 2 213 | 1.949 | 0.050 | 0.025 | 0.233 | 0.284 |
| Current tobacco smokers | 0.256 | 0.013 | 2 215 | 2.017 | 0.051 | 0.026 | 0.230 | 0.281 |
| Current cigarette smokers | 0.253 | 0.013 | 2 215 | 1.999 | 0.052 | 0.026 | 0.227 | 0.278 |
| Current users of smokeless tobacco | 0.011 | 0.002 | 2 202 | 0.875 | 0.187 | 0.004 | 0.007 | 0.015 |
| Daily tobacco smokers | 0.216 | 0.012 | 2 215 | 2.016 | 0.057 | 0.024 | 0.192 | 0.241 |
| Daily cigarette smokers | 0.212 | 0.013 | 2 215 | 2.174 | 0.060 | 0.025 | 0.186 | 0.237 |
| Daily users ofsmokeless tobacco | 0.003 | 0.001 | 2 202 | 1.135 | 0.397 | 0.003 | 0.001 | 0.006 |
| Former daily tobacco smokers, among all adults | 0.033 | 0.004 | 2 215 | 0.867 | 0.107 | 0.007 | 0.026 | 0.040 |
| Former tobacco smokers,among ever daily smokers | 0.121 | 0.013 | 606 | 0.988 | 0.109 | 0.026 | 0.096 | 0.147 |
| Time to first smoke within 5 minutes of waking up | 0.129 | 0.018 | 472 | 1.401 | 0.142 | 0.036 | 0.093 | 0.164 |
| Time to first smoke within 6-30 minutes of waking up | 0.366 | 0.025 | 472 | 1.289 | 0.069 | 0.049 | 0.317 | 0.416 |
| Made an attempt to quit smokingin the past 12 months | 0.307 | 0.021 | 567 | 1.207 | 0.069 | 0.042 | 0.265 | 0.349 |
| Health care provider asked about smoking | 0.617 | 0.039 | 203 | 1.282 | 0.063 | 0.076 | 0.541 | 0.693 |
| Health care provider advised quitting smoking | 0.514 | 0.043 | 201 | 1.502 | 0.084 | 0.085 | 0.430 | 0.599 |
| Use of pharmacotherapy for smoking cessation | 0.270 | 0.039 | 167 | 1.263 | 0.143 | 0.076 | 0.194 | 0.346 |
| Use of counseling/advice for smoking cessation | 0.120 | 0.034 | 170 | 1.822 | 0.281 | 0.066 | 0.054 | 0.186 |
| Planning to quit, thinking about quitting, or will quit smoking | 0.662 | 0.025 | 558 | 1.555 | 0.038 | 0.049 | 0.613 | 0.711 |
| Exposure to secondhand smoke at home | 0.155 | 0.014 | 2 137 | 3.166 | 0.090 | 0.027 | 0.128 | 0.182 |
| Exposure to secondhand smoke at workplace | 0.180 | 0.022 | 1 218 | 4.168 | 0.125 | 0.044 | 0.136 | 0.224 |
| Exposure to secondhand smoke in government buildings/offices | 0.046 | 0.008 | 2 190 | 2.871 | 0.166 | 0.015 | 0.031 | 0.060 |
| Exposure to secondhand smoke in health care facilities | 0.032 | 0.007 | 2 196 | 3.216 | 0.210 | 0.013 | 0.019 | 0.045 |
| Exposure to secondhand smoke in restaurants | 0.084 | 0.011 | 2 196 | 3.295 | 0.128 | 0.021 | 0.063 | 0.105 |
| Exposure to secondhand smoke in public transportation | 0.128 | 0.012 | 2 203 | 2.744 | 0.092 | 0.023 | 0.105 | 0.151 |
| Last cigarette purchase in store | 0.818 | 0.021 | 546 | 1.551 | 0.025 | 0.040 | 0.777 | 0.858 |
| Last cigarette purchase at kiosk | 0.059 | 0.014 | 549 | 2.045 | 0.244 | 0.028 | 0.031 | 0.087 |
| Noticed antitobacco information on radio or television | 0.371 | 0.018 | 2 201 | 3.055 | 0.049 | 0.035 | 0.336 | 0.406 |
| Noticed health warning labels on cigarette packages | 0.944 | 0.012 | 565 | 1.411 | 0.012 | 0.023 | 0.921 | 0.966 |
| Thinking of quitting because of health warning labels on cigarette package | 0.507 | 0.025 | 556 | 1.370 | 0.049 | 0.049 | 0.458 | 0.555 |
| Noticed any cigarette advertisement, marketing, or promotion | 0.280 | 0.020 | 2 182 | 4.135 | 0.070 | 0.038 | 0.242 | 0.318 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Noticed cigarette advertisements in stores where cigarettes are sold | 0.136 | 0.016 | 2 199 | 4.930 | 0.119 | 0.032 | 0.104 | 0.168 |
| Believes that tobacco smoking causes serious illness | 0.858 | 0.012 | 2 210 | 2.545 | 0.014 | 0.023 | 0.835 | 0.881 |
| Believes that tobacco smoking causes strokes | 0.708 | 0.015 | 2 205 | 2.246 | 0.020 | 0.028 | 0.680 | 0.737 |
| Believes that tobacco smoking causes heart attacks | 0.722 | 0.016 | 2 203 | 2.743 | 0.022 | 0.031 | 0.691 | 0.753 |
| Believes that tobacco smoking causes lung cancer | 0.893 | 0.011 | 2 205 | 2.838 | 0.012 | 0.022 | 0.871 | 0.915 |
| Believes that u\sing smokeless tobacco causes serious illness | 0.752 | 0.015 | 2 207 | 2.515 | 0.019 | 0.029 | 0.724 | 0.781 |
| Believes that secondhand smoke causes serious illness in nonsmokers | 0.763 | 0.016 | 2 213 | 3.038 | 0.021 | 0.031 | 0.733 | 0.794 |
| Number of cigarettes smoked per day (by daily smokers) | 13.669 | 0.410 | 469 | 1.699 | 0.030 | 0.804 | 12.865 | 14.474 |
| Years since quitting smoking | 10.812 | 1.418 | 78 | 1.569 | 0.131 | 2.779 | 8.034 | 13.591 |
| Monthly expenditures (in tenge) on manufactured cigarettes | 4 253.170 | 349.063 | 519 | 1.485 | 0.082 | 684.164 | 3 569.005 | 4 937.334 |
| Age at initiation of daily smokingamong adults aged 20-34 years | 18.606 | 0.234 | 226 | 1.597 | 0.013 | 0.459 | 18.147 | 19.066 |
| Average amount (in tenge) spent on 20 manufactured cigarettes | 237.096 | 17.911 | 519 | 1.069 | 0.076 | 35.105 | 201.991 | 272.201 |
| Average cost (in tenge) per 100 packs of manufactured cigarettes | 23 709.596 | 1 791.070 | 519 | 1.069 | 0.076 | 3 510.497 | 20 199.099 | 27 220.093 |

**Table C5:Sampling Errors for Rural Sample, GATS Kazakhstan, 2014.**

| | | | | | | | **Confidence Limits** | |
|---|---|---|---|---|---|---|---|---|
| Indicator | **Estimate ( R )** | **Standard error (SE)** | **Sample size (n)** | **Design effect (DEFF)** | **Relative error (SE/R)** | **Margin of error (MOE)** | **Lower limit (R-1.96SE)** | **Upper limit (R+1.96SE)** |
| Current tobacco users | 0.190 | 0.011 | 2 207 | 1.786 | 0.059 | 0.022 | 0.168 | 0.212 |
| Current tobacco smokers | 0.182 | 0.011 | 2 210 | 1.746 | 0.060 | 0.021 | 0.161 | 0.204 |
| Current cigarette smokers | 0.181 | 0.011 | 2 210 | 1.737 | 0.060 | 0.021 | 0.160 | 0.202 |
| Current users of smokeless tobacco | 0.016 | 0.004 | 2 206 | 2.397 | 0.260 | 0.008 | 0.008 | 0.024 |
| Daily tobacco smokers | 0.158 | 0.009 | 2 210 | 1.445 | 0.059 | 0.018 | 0.140 | 0.176 |
| Daily cigarette smokers | 0.155 | 0.009 | 2 210 | 1.403 | 0.059 | 0.018 | 0.138 | 0.173 |
| Daily users ofsmokeless tobacco | 0.006 | 0.002 | 2 206 | 1.592 | 0.344 | 0.004 | 0.002 | 0.010 |
| Former daily tobacco smokers,among all adults | 0.029 | 0.004 | 2 210 | 1.019 | 0.125 | 0.007 | 0.022 | 0.036 |
| Former tobacco smokers,among ever daily smokers | 0.142 | 0.018 | 516 | 1.416 | 0.129 | 0.036 | 0.106 | 0.178 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Time to first smoke within 5 minutes of waking up | 0.110 | 0.017 | 391 | 1.180 | 0.156 | 0.034 | 0.076 | 0.144 |
| Time to first smoke within 6-30 minutes of waking up | 0.425 | 0.039 | 391 | 2.406 | 0.091 | 0.076 | 0.349 | 0.501 |
| Made an attempt to quit smoking in the past 12 months | 0.274 | 0.028 | 467 | 1.781 | 0.101 | 0.054 | 0.220 | 0.328 |
| Health care provider asked about smoking | 0.539 | 0.051 | 153 | 1.586 | 0.094 | 0.100 | 0.439 | 0.639 |
| Health care provider advised quitting smoking | 0.371 | 0.048 | 152 | 1.482 | 0.129 | 0.094 | 0.277 | 0.465 |
| Use of Pharmacotherapy for smoking cessation | 0.163 | 0.049 | 123 | 2.114 | 0.299 | 0.095 | 0.067 | 0.258 |
| Use of counseling/advice for smoking cessation | 0.067 | 0.033 | 124 | 2.175 | 0.495 | 0.065 | 0.002 | 0.133 |
| Planning to quit, thinking about quitting, or will quit smoking | 0.595 | 0.030 | 440 | 1.678 | 0.051 | 0.059 | 0.535 | 0.654 |
| Exposure to secondhand smoke at home | 0.115 | 0.014 | 2 022 | 3.995 | 0.123 | 0.028 | 0.087 | 0.143 |
| Exposure to secondhand smoke at workplace | 0.211 | 0.023 | 890 | 2.797 | 0.109 | 0.045 | 0.166 | 0.255 |
| Exposure to secondhand smoke in government buildings/offices | 0.035 | 0.008 | 2 144 | 3.603 | 0.215 | 0.015 | 0.020 | 0.050 |
| Exposure to secondhand smoke in health care facilities | 0.048 | 0.013 | 2 154 | 8.261 | 0.277 | 0.026 | 0.022 | 0.073 |
| Exposure to secondhand smoke in restaurants | 0.109 | 0.019 | 2 164 | 7.860 | 0.172 | 0.037 | 0.072 | 0.146 |
| Exposure to secondhand smoke in public transportation | 0.066 | 0.013 | 2 182 | 5.627 | 0.192 | 0.025 | 0.041 | 0.090 |
| Last cigarette purchase in store | 0.920 | 0.018 | 444 | 1.959 | 0.020 | 0.035 | 0.885 | 0.956 |
| Last cigarette purchase at kiosk | - | - | - | - | - | - | - | - |
| Noticed antitobacco information on radio or television | 0.314 | 0.028 | 2 187 | 8.166 | 0.090 | 0.056 | 0.259 | 0.370 |
| Noticed health warning labels on cigarette packages | 0.957 | 0.011 | 454 | 1.410 | 0.012 | 0.022 | 0.934 | 0.979 |
| Thinking of quitting Because of health warning labels on cigarette package | 0.525 | 0.030 | 451 | 1.663 | 0.058 | 0.059 | 0.465 | 0.584 |
| Noticed any cigarette advertisement, marketing,or promotion | 0.226 | 0.029 | 2 154 | 10.416 | 0.129 | 0.057 | 0.169 | 0.283 |
| Noticed cigarette advertisements in stores where cigarettes are sold | 0.145 | 0.026 | 2 198 | 11.522 | 0.176 | 0.050 | 0.095 | 0.195 |
| Believes that tobacco smoking causes serious illness | 0.836 | 0.017 | 2 204 | 4.419 | 0.020 | 0.032 | 0.804 | 0.869 |
| Believes that tobacco smoking causes strokes | 0.633 | 0.019 | 2 204 | 3.362 | 0.030 | 0.037 | 0.596 | 0.670 |
| Believes that tobacco smoking causes heart attacks | 0.607 | 0.022 | 2 201 | 4.300 | 0.036 | 0.042 | 0.565 | 0.650 |
| Believes that tobacco smoking causes lung cancer | 0.875 | 0.016 | 2 195 | 5.319 | 0.019 | 0.032 | 0.843 | 0.907 |
| Believes that using smokeless tobacco causes serious illness | 0.702 | 0.023 | 2 203 | 5.664 | 0.033 | 0.045 | 0.657 | 0.747 |
| Believes that secondhand smoke causes serious illness in nonsmokers | 0.709 | 0.026 | 2 207 | 7.394 | 0.037 | 0.052 | 0.658 | 0.761 |
| Number of cigarettes smoked per day (by daily smokers) | 17.202 | 0.784 | 390 | 2.013 | 0.046 | 1.537 | 15.664 | 18.739 |
| Years since quitting smoking | 9.525 | 1.076 | 86 | 1.020 | 0.113 | 2.110 | 7.415 | 11.635 |
| Monthly expenditures (in tenge) on manufactured cigarettes | 4 | 279.264 | 402 | 1.195 | 0.066 | 547.358 | 3 | 4 774.791 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 227.433 | | | | | | 680.075 | |
| Age at initiation of daily smoking among adults aged 20-34 years | 18.623 | 0.380 | 97 | 1.204 | 0.020 | 0.745 | 17.877 | 19.368 |
| Average amount (in tenge) spent on 20 manufactured cigarettes | 196.037 | 9.233 | 402 | 1.027 | 0.047 | 18.096 | 177.942 | 214.133 |
| Average cost (in tenge) per 100 packs of manufactured cigarettes | 19 603.738 | 923.258 | 402 | 1.027 | 0.047 | 1 809.587 | 17 794.151 | 21 413.324 |

# Appendix D. Technical and Survey Staff

## Ministry of Health and Social Development of the Republic of Kazakhstan

**Kulkaeva Gulnara Utepbergenovna**, Director of the Medical Care Department

## National Centre for Problems of Healthy Lifestyle Development

Prof. **Battakova Zhamilya Erkinovna**, d.m.s., MD, Director of National Centre for Problems of Healthy Lifestyle Development, GATS Principal Investigator.

**Tokmurziyeva Gulnara Zhenisovna**, d.m.s., MD, Deputy Director on Science, National Centre for Problems of Healthy Lifestyle Development,GATS Co-Principal Investigator.

Prof. **Khaidarova Togzhan Sapharzhanovna**, d.m.s., MD, Director of Science Department, National Centre for Problems of Healthy Lifestyle Development, GATS Coordinator, scientist-analyst.

**Tolegenova Gulmira Orynbassarovna**, Deputy Director on organizational work and finance.

**Abdrakhmanova Shynar Zinonovna**, MD, research officer, National Centre for Problems of Healthy Lifestyle Development, researcher-analyst, translator.

## Committee on Statistics of the Republic of Kazakhstan

**Kozbanov Zhandos Esenbayevich** - Head of the Department of Sample Surveys, Registers and Publications, specialist on GATS sample design.

## Information Computing Centre (ICC), Committee on Statistics RK

1. **Rakhmetov Nurlybek Zheksenovich** - Deputy Director of Republican State Enterprise (RSE) ICC, coordination with the three international partners:World Health Organization (WHO), US Centers for Disease Control and Prevention (CDC), CDCFoundation.
2. **Gabdullina Asem Bazarbekovna** - Director of maintenance information and statistical systems, RSE ICC, coordinator for GATS data collection.
3. **Umirbaeva Asel Konirtaevna** - Head of implementation and maintenance of information systems (IS) for the support of statistical observations, Department of Information and Statistical Systems RSE ICC, information technology specialist.
4. **Agaysina Salim Ziadaevna** - Chief specialist in the implementation and maintenance of IS on statistical observations support, Department of Information and Statistical Systems, RSE ICC.GATS data collection specialist.

## World Health Organization:

**Gaukhar Abuova**, National Professional Officer, WHO Country Office Kazakhstan

**Melita Vujnovic**, WHO Representative, WHO Country Office Kazakhstan

**Rula Khoury**, Technical Officer, Tobacco surveillance, WHO Regional Office for Europe

**Kristina Mauer-Stender**, Programme Manager Tobacco Control, WHO Regional Office for Europe

**Gauden Galea, Director**, Division of Noncommunicable Diseases and Promoting Health through the Life-course, WHO Regional Office for Europe

**Trudy Wijnhoven**, Technical Officer, Tobacco Control Programme, WHO Regional Office for Europe

## Centers for Disease Control and Prevention (CDC)

**Jeremy Morton**, Survey Methodologist: CDC Technical Focal Point for GATS Kazakhstan

**Luhua Zhao**, Statistician: Consultation on sampling design and conduct of sample weighting for GATS Kazakhstan

**Glenda Blutcher-Nelson**, Statistician: Data analysis including population of fact sheet and country report tables

## University of North Carolina (UNC)

**William Kalsbeek**, Consultant: Consultation on sampling design

**RTI International**

**Steve Litavecz,** Programmer: IT focal point for GATS Kazakhstan

# Appendix E. Questionnaire

## Kazakhstan Global Adult Tobacco Survey (GATS)

## Questionnaire
## 2014

## 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 OLD, ONLY IF NO HOUSEHOLD MEMBERS ARE 18 YEARS OF AGE OR OLDER.]

**INTRO1.** An important survey of adult tobacco use behavior is being conducted by the Ministry of Health throughout the Republic of Kazakhstan 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 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 A CODE 201.]

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

**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, 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 male or female?

MALE ..... ☐1
FEMALE..... ☐2

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

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 SELECTED RESPONDENTIS AVAILABLE AND IF SO, PROCEED TO THE INDIVIDUAL QUESTIONNAIRE.

IF SELECTED RESPONDENTIS NOT AVAILABLE, MAKE AN APPOINTMENT AND RECORD IT AS A COMMENT ON RECORD OF CALLS.]

NAME_____

DATE OF NEXT VISIT:_____ TIME:_____

DATE OF NEXT VISIT:_____ TIME:_____

## Individual Questionnaire

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

15-17 ..... ☐1→ GO TO CONSENT2
18 OR OLDER ..... ☐2→ GO TO CONSENT5
EMANCIPATED MINOR (15-17) ..... ☐3→ GO TO CONSENT5

**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 the Information Computing Center of Republic of Kazakhstan Agency on Statistics. This institution is collecting information about tobacco use in Kazakhstan. This information will be used for public health purposes by the Ministry of Health RK.

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

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

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 the Information Computing Center of Republic of Kazakhstan Agency on Statistics. This institution is collecting information about tobacco use in Kazakhstan. This information will be used for public health purposes by the Ministry of Health RK.

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.** [INTERVIEW LANGUAGE]

[RUSSIAN] ..... ☐1
[KAZAKH] ..... ☐2

## 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.]

MALE ..... ☐1
FEMALE ... ☐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]

NO FORMAL SCHOOLING ..... ☐1
PRIMARY EDUCATION ..... ☐2
INCOMPLETE BASIC EDUCATION ..... ☐3
SECONDARY GENERAL EDUCATION ..... ☐4
SECONDARY TECHNICAL/VOCATIONAL EDUCATION .. ☐5
SOME COLLEGE/UNIVERSITY ..... ☐6
COLLEGE/UNIVERSITY COMPLETED..... ☐7
POST GRADUATE DEGREE COMPLETED ..... ☐8
DON'T KNOW ..... ☐77
REFUSED..... ☐99

**A05.** Which of the following best describes your *main* work status over the past 12 months? Government employee, non-government employee, self-employed, student, homemaker, retired, unemployed-able to work, or unemployed-unable to work?

[INCLUDE SUBSISTENCE FARMING AS SELF-EMPLOYED]

GOVERNMENT EMPLOYEE ..... ☐1
NON-GOVERNMENT EMPLOYEE..... ☐2
SELF-EMPLOYED ..... ☐3
STUDENT ..... ☐4
HOMEMAKER..... ☐5
RETIRED ..... ☐6
UNEMPLOYED, ABLE TO WORK..... ☐7
UNEMPLOYED, UNABLE TO WORK.... ☐8
DON'T KNOW ..... ☐77
REFUSED..... ☐99

**[IF A05=6 (RETIRED), GO TO A05a. ELSE GO TO A06.]**

**A05a.** Did you do any work in the past 12 months?

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

**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? | ☐1 | ☐2 | ☐7 | ☐9 |
| b. Flush toilet? | ☐1 | ☐2 | ☐7 | ☐9 |
| c. Fixed telephone? | ☐1 | ☐2 | ☐7 | ☐9 |
| d. Cell telephone? | ☐1 | ☐2 | ☐7 | ☐9 |
| e. Television? | ☐1 | ☐2 | ☐7 | ☐9 |
| f. Radio? | ☐1 | ☐2 | ☐7 | ☐9 |
| g. Refrigerator? | ☐1 | ☐2 | ☐7 | ☐9 |
| h. Car? | ☐1 | ☐2 | ☐7 | ☐9 |
| i. Moped/scooter/motorcycle? | ☐1 | ☐2 | ☐7 | ☐9 |
| j. Washing machine? | ☐1 | ☐2 | ☐7 | ☐9 |

**AA1.** Which of the following statements best describes your attitude to income of your family now? Our income now allows us to live comfortably; Income is enough for good nutrition and to buy the necessary things; Income only enough for food; Our income does not even allow us to make ends meet.

[SELECT ONE ANSWER]

OUR INCOME NOW ALLOWS US TO LIVE COMFORTABLY ☐ 1
INCOME IS ENOUGH FOR GOOD NUTRITION AND TO BUY THE NECESSARY THINGS ☐ 2
INCOME ONLY ENOUGH FOR FOOD ☐ 3
OUR INCOME DOES NOT EVEN ALLOW US TO MAKE ENDS MEET ☐ 4
DO NOT KNOW ☐ 5
REFUSED ☐9

**A09.** What is your nationality?

KAZAKH ☐ 1
RUSSIAN ☐ 2
KIRGHIZ ☐ 3
UZBEK ☐ 4
KURD ☐ 5
TATAR ☐ 6
UKRAINIAN. ☐ 7
GERMAN ☐ 8
KOREAN ☐ 9
OTHER ☐10 →A09a. [SPECIFY]:_____
DON'T KNOW ☐77
REFUSED ☐99

**A10.** What is your religion?

ISLAM ..... ☐1
CHRISTIANITY ..... ☐2
JUDAISM ..... ☐3
BUDDHISM ..... ☐4
OTHER ..... ☐5 →A10a. [SPECIFY]:_____
IRRELIGIOUS ..... ☐6
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**A11.** What is your marital status? Would you say single, married, civil marriage, separated, divorced, or widowed?

SINGLE ..... ☐1
MARRIED ..... ☐2
CIVIL MARRIAGE ..... ☐3
SEPARATED ..... ☐4
DIVORCED ..... ☐5
WIDOWED ..... ☐6
REFUSED ..... ☐9

## Section B. Tobacco Smoking

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

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 DONE 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]

| | |
|---|---|
| | |

**[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]

| | |
|---|---|
| | |

**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 cigarettes? | | | | *PER DAY* |
| a1. **[IF B06a=888]** On average, how many manufactured cigarettes do you currently smoke each week? | | | | *PER WEEK* |
| b. Hand-rolled cigarettes? | | | | *PER DAY* |
| b1. **[IF B06b=888]** On average, how many hand-rolled cigarettes do you currently smoke each week? | | | | *PER WEEK* |
| d. Pipes full of tobacco? | | | | *PER DAY* |
| d1. **[IF B06d=888]** On average, how many pipes full of tobacco do you currently smoke each week? | | | | *PER WEEK* |
| e. Cigars or cigarillos? | | | | *PER DAY* |
| e1. **[IF B06e=888]** On average, how many cigars or cigarillos do you currently smoke each week? | | | | *PER WEEK* |
| f. Number of hookah sessions per day? | | | | *PER DAY* |
| f1. **[IF B06f=888]** On average, how many hookah sessions do you currently participate in each week? | | | | *PER WEEK* |
| g. Any others? (→g1. Please specify the other type you currently smoke:_____) | | | | *PER DAY* |
| g2. **[IF B06g=888]** 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 to 30 minutes, 31 to 60 minutes, or more than 60 minutes?

WITHIN 5 MINUTES..... ☐1
6 TO 30 MINUTES ..... ☐2
31 TO 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]

| | |
|---|---|
| | |

**[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<u>WITHIN THE PAST 30 DAYS</u>, 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 cigarettes? ..... | | | | *PER WEEK* |
| b. Hand-rolled cigarettes?..... | | | | *PER WEEK* |
| d. Pipes full of tobacco?..... | | | | *PER WEEK* |
| e. Cigars, or cigarillos? ..... | | | | *PER WEEK* |
| f. Number of hookah sessions per week?..... | | | | *PER WEEK* |
| g. Any others? ..... | | | | *PER WEEK* |

→g1. Please specify the other type you currently smoke:

_____

**[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]

| | |
|---|---|
| | |

**[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)]

| | | |
|---|---|---|
| | | |

**[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 to 5 times, or 6 or more times?

1 OR 2 ..... ☐1
3 TO 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. Counseling, including at smoking cessation clinics and health care settings? | ☐1 | ☐2 | ☐9 |
| b. Nicotine replacement therapy, such as the patch or gum? | ☐1 | ☐2 | ☐9 |
| c. Other prescription medications, for example Tabex? | ☐1 | ☐2 | ☐9 |
| d. Traditional medicines, for example acupuncture or reflexology? | ☐1 | ☐2 | ☐9 |
| e. Psychotherapy, for example, hypnosis? | ☐1 | ☐2 | ☐9 |
| f. Switching to smokeless tobacco? | ☐1 | ☐2 | ☐9 |
| f1. Quit without assistance? | ☐1 | ☐2 | ☐9 |
| g. Anything else? | ☐1 | ☐2 | ☐9 |

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

_____

## Section WP – Water Pipe (Hookah) Module

**ROUTING:**
**– CURRENT WATER PIPE SMOKERS:IF (B01=1 OR 2) AND [(B06f>0 AND <=888) OR (B10f>0 AND <=888)], GO TO WP4**
**– OTHERWISE, GO TO NEXT SECTION**

**WP4.** I would now like to ask you some questions about smoking hookah.

How old were you when you first started smoking hookah?

[IF REFUSED, ENTER 99]

| | |
|---|---|
| | |

**WP5.** The last time you smoked hookah, how long did you participate in the hookah smoking session?

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

HOURS ..... ☐1
MINUTES ..... ☐2
DON'T KNOW ..... ☐7→ SKIP TO WP6
REFUSED ..... ☐9→ SKIP TO WP6

**WP5a.** [ENTER NUMBER OF (HOURS/MINUTES)]

| | |
|---|---|
| | |

**WP6.** The last time you smoked hookah, how many other people did you share the same pipe with during the session?

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

| | |
|---|---|
| | |

**WP7.** The last time you smoked hookah, about how many rocks were smoked while you were participating in the session?

LESS THAN 1 ..... ☐0
1 ..... ☐1
2 ..... ☐2
3 ..... ☐3
4 ..... ☐4
5 OR MORE ..... ☐5
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**WP8.** The last time you smoked hookah, where did you smoke it?

HOME ..... ☐1
COFFEE SHOP ..... ☐2
BAR/CLUB ..... ☐3
RESTAURANT ..... ☐4
OTHER ..... ☐5→WP8a. Specify other place:_____
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**WP9.** The last time you smoked hookah, did you smoke it with flavored tobacco, unflavored tobacco, or both?

FLAVORED ..... ☐1
UNFLAVORED ..... ☐2
BOTH ..... ☐3
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**WP10.** The last time you smoked hookah, was the water in the water pipe tank mixed with other substances?

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

## Section C. Smokeless Tobacco

**C00.** The next questions are about using smokeless tobacco, such as nasvay or chewing tobacco. 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 C10
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 C10
NO ..... ☐2→ SKIP TO C10
DON'T KNOW ..... ☐7→ SKIP TO C10
REFUSED ..... ☐9→ SKIP TO C10

**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

**C10.** How many times a week do you usually use the following?

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

| | | | | |
|---|---|---|---|---|
| a. Nasvay, by mouth? | | | | *TIMES PER WEEK* |
| b. Nasvay, by nose? | | | | *TIMES PER WEEK* |
| c. Chewing tobacco? | | | | *TIMES PER WEEK* |
| e. Any others? | | | | *TIMES PER WEEK* |

→ e1. Please specify the other type you currently use during a usual week:

_____

**C18.** During the past 12 months, did you use any of the following to try to stop using smokeless tobacco?

| | YES ▼ | NO ▼ | REFUSED ▼ |
|---|---|---|---|
| a. Counseling, including at tobacco cessation clinics and health care settings? | ☐1 | ☐2 | ☐9 |
| b. Nicotine replacement therapy, such as the patch or gum? | ☐1 | ☐2 | ☐9 |
| c. Other prescription medications, for example Tabex? | ☐1 | ☐2 | ☐9 |
| d. Traditional medicines, for example acupuncture orreflexology? | ☐1 | ☐2 | ☐9 |
| e. Psychotherapy, for example, hypnosis? | ☐1 | ☐2 | ☐9 |
| f1. Quit without assistance? | ☐1 | ☐2 | ☐9 |
| g. Anything else? | ☐1 | ☐2 | ☐9 |

→ g1. Please specify what you used to try to stop using smokeless tobacco:

_____

**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 use tobacco on a daily basis or less than daily?

DAILY ..... ☐1
LESS THAN DAILY ..... ☐2
REFUSED ..... ☐9

**[SKIP TO NEXT SECTION]**

## Section EC. Electronic Cigarettes

**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→ **SKIP TO NEXT SECTION**
LESS THAN DAILY ..... ☐2→ **SKIP TO NEXT SECTION**
NOT AT ALL ..... ☐3
REFUSED..... ☐9

**EC3.** Have you ever, *even once*, used an electronic cigarette?

YES ..... ☐1
NO ..... ☐2
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)]

| | | |
|---|---|---|
| | | |

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

| | YES ▼ | NO ▼ | REFUSED ▼ |
|---|---|---|---|
| a. Counseling, including at smoking cessation clinics and health care settings? | ☐1 | ☐2 | ☐9 |
| b. Nicotine replacement therapy, such as the patch or gum? | ☐1 | ☐2 | ☐9 |
| c. Other prescription medications, for example Tabex? | ☐1 | ☐2 | ☐9 |
| d. Traditional medicines, for example acupuncture or reflexology? | ☐1 | ☐2 | ☐9 |
| e. Psychotherapy, for example, hypnosis? | ☐1 | ☐2 | ☐9 |
| f. Switching to smokeless tobacco? | ☐1 | ☐2 | ☐9 |
| f1. Quit without assistance? | ☐1 | ☐2 | ☐9 |
| g. Anything else? | ☐1 | ☐2 | ☐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 to 5 times, or 6 or more times?

1 OR 2 ..... ☐1
3 TO 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 someday 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. Secondhand Smoke

**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 of your home: Smoking is allowed inside of your home, smoking is generally not allowed inside of your home but there are exceptions, smoking is never allowed inside of your home, or there are no rules about smoking in your home?

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 work place?

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 past30 days, did you visit any government buildings or government offices?

YES ..... ☐1
NO ..... ☐2→ SKIP TO E23
DON'T KNOW ..... ☐7→ SKIP TO E23
REFUSED ..... ☐9→ SKIP TO E23

**E10.** Did anyone smoke inside of any government buildings or government offices that you visited in the past 30 days?

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

**E23.** During the past 30 days, did you visit any private workplaces other than your work?

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

E24. Did anyone smoke inside of any private workplaces 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 college/university?

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

E22. Did anyone smoke inside of any college/university 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 school or educational facility?

YES ..... ☐1
NO ..... ☐2→ SKIP TO E11
DON'T KNOW ..... ☐7→ SKIP TO E11
REFUSED ..... ☐9→ SKIP TO E11

E20. Did anyone smoke inside of any school or educational facility 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 facilities?

YES ..... ☐1
NO ..... ☐2→ SKIP TO E13
DON'T KNOW ..... ☐7→ SKIP TO E13
REFUSED ..... ☐9→ SKIP TO E13

**E12.** Did anyone smoke inside of any 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 restaurants?

YES ..... ☐1
NO ..... ☐2→ SKIP TO E25
DON'T KNOW ..... ☐7→ SKIP TO E25
REFUSED ..... ☐9→ SKIP TO E25

E14. Did anyone smoke inside of any 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 E27
DON'T KNOW ..... ☐7→ SKIP TO E27
REFUSED ..... ☐9→ SKIP TO E27

E26. Did anyone smoke inside of any bar or night club that you visited in the past 30 days?

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

E27. During the past 30 days, did you visit any café or cafeteria?

YES ..... ☐1
NO ..... ☐2→ SKIP TO E15
DON'T KNOW ..... ☐7→ SKIP TO E15
REFUSED ..... ☐9→ SKIP TO E15

E28. Did anyone smoke inside of any café or cafeteria 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 E17
DON'T KNOW ..... ☐7→ SKIP TO E17
REFUSED..... ☐9→ SKIP TO E17

E16. Did anyone smoke inside of any public transportation that you used in the past 30 days?

YES ..... ☐1
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 Cigarettes

**IF [B01=1 OR 2 (RESPONDENT CURRENTLY SMOKES DAILY OR LESS THAN DAILY)]**
**AND**
**[(B06a OR B10a)> 0 AND <= 888 (RESPONDENT SMOKES MANUFACTURED CIGARETTES)],**
**THEN CONTINUE WITH THIS SECTION.**

**OTHERWISE, SKIP TO NEXT SECTION.**

**F01a.** The next few questions are about the last time you purchased cigarettes for yourself to smoke.

The last time you bought cigarettes for yourself, how many cigarettes did you buy?

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

CIGARETTES ..... ☐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/PACKS/CARTONS/OTHER)]

| | | |
|---|---|---|
| | | |

**[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 cigarettes were in each {F01c}?

[IF REFUSED, ENTER 999]

| | | |
|---|---|---|
| | | |

**[GO TO F02]**

**F02.** In total, how much money did you pay for this purchase?

[IF DON'T KNOW OR REFUSED, ENTER 999]

| |
|---|
| |

**TENGE**

**F03.** What brand did you buy the last time you purchased cigarettes for yourself?

DAVIDOFF ☐ 1
WEST ☐ 2
KENT ☐ 3
L&M ☐ 4
MARLBORO ☐ 5
PARLIAMENT ☐ 6
SOBRANIE ☐ 7
SOVEREIGN ☐ 8
STATE LINE ☐ 9
IMPERIAL CLASSIC ☐ 10
BOND ☐ 11
KAZAKHSTANSKIE ☐ 12
OTHER ☐ 13→ F03a. [SPECIFY BRAND]:_____
REFUSED ☐ 99

**F04.** The last time you purchased cigarettes for yourself, where did you buy them?

VENDING MACHINE ☐ 1
STORE ☐ 2
STREET VENDOR OR MARKET ☐ 3
OUTSIDE THE COUNTRY ☐ 4
KIOSK ☐ 5
INTERNET ☐ 6
RESTAURANT/BAR ☐ 7
GAS STATION ☐ 8
OTHER ☐ 9→ F04a. [SPECIFY LOCATION]:_____
DON'T REMEMBER ☐ 77
REFUSED ☐ 99

**F05.** Were these cigarettes filtered or non-filtered?

FILTERED..... ☐1
NON-FILTERED..... ☐2
REFUSED..... ☐9

**F06.** Were these cigarettes labeled as light, mild, or low tar?

LIGHT ..... ☐1
MILD ..... ☐2
LOW TAR..... ☐3
NONE OF THE ABOVE.. ☐4
DON'T KNOW ..... ☐7
REFUSED..... ☐9

## Section G. Media

**G01intro.** The next few questions ask about your exposure to the media and advertisements in the last 30 days.

**G01.** In the last 30 days, have you noticed *information* about the dangers of smoking cigarettes or that encourages quitting in any of the following places?

| | YES ▼ | NO ▼ | NOT APPLICABLE ▼ | REFUSED ▼ |
|---|---|---|---|---|
| a. In newspapers or in magazines? | ☐1 | ☐2 | ☐7 | ☐9 |
| b. On television? | ☐1 | ☐2 | ☐7 | ☐9 |
| c. On the radio? | ☐1 | ☐2 | ☐7 | ☐9 |
| d. On billboards? | ☐1 | ☐2 | ☐7 | ☐9 |
| e. Somewhere else? | ☐1 | ☐2 | | ☐9 |

[DO NOT INCLUDE HEALTH WARNINGS ON CIGARETTE PACKAGES]

→ e1. Please specify where: _____

**G02.** In the last 30 days, did you notice any health warnings on cigarette packages?

YES ..... ☐1
NO ..... ☐2→ SKIP TO G04
DID NOT SEE ANY CIGARETTE PACKAGES ... ☐3→ SKIP TO G04
REFUSED ..... ☐9→ SKIP TO G04

**G03.** [ADMINISTER IF B01 = 1 OR 2. ELSE GO TO G04]

In the last 30 days, have warning labels on cigarette packages led you to think about quitting?

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

**G04.** In the last 30 days, have you noticed any *advertisements or signs promoting* cigarettes in the following places?

| | YES | NO | NOT APPLICABLE | REFUSED |
|---|---|---|---|---|
| | ▼ | ▼ | ▼ | ▼ |
| a. In stores where cigarettes are sold? | ☐1 | ☐2 | ☐7 | ☐9 |
| b. On television? | ☐1 | ☐2 | ☐7 | ☐9 |
| c. On the radio? | ☐1 | ☐2 | ☐7 | ☐9 |
| d. On billboards? | ☐1 | ☐2 | ☐7 | ☐9 |
| f. In newspapers or magazines? | ☐1 | ☐2 | ☐7 | ☐9 |
| g. In cinemas? | ☐1 | ☐2 | ☐7 | ☐9 |
| h. On the internet? | ☐1 | ☐2 | ☐7 | ☐9 |
| i. On public transportation vehicles or stations? | ☐1 | ☐2 | ☐7 | ☐9 |
| k. Anywhere else? | ☐1 | ☐2 | ☐7 | ☐9 |

→k1. Please specify where: _____

**G05.** In the last 30 days, have you noticed any sport or sporting event that is associated with cigarette brands or cigarette companies?

YES ☐1
NO ☐2
DON'T KNOW ☐7
REFUSED ☐9

**G06.** In the last 30 days, have you noticed any of the following types of cigarette promotions?

| | YES | NO | DON'T KNOW | REFUSED |
|---|---|---|---|---|
| | ▼ | ▼ | ▼ | ▼ |
| a. Free samples of cigarettes? | ☐1 | ☐2 | ☐7 | ☐9 |
| b. Cigarettes at sale prices? | ☐1 | ☐2 | ☐7 | ☐9 |
| c. Coupons for cigarettes? | ☐1 | ☐2 | ☐7 | ☐9 |
| d. Free gifts or special discount offers on other products when buying cigarettes? | ☐1 | ☐2 | ☐7 | ☐9 |
| e. Clothing or other items with a cigarette brand name or logo? | ☐1 | ☐2 | ☐7 | ☐9 |
| f. Cigarette promotions in the mail? | ☐1 | ☐2 | ☐7 | ☐9 |

## Section H. Knowledge, Attitudes & Perceptions

**H01.** The next question is asking 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)? | ☐1 | ☐2 | ☐7 | ☐9 |
| b. Heart attack? | ☐1 | ☐2 | ☐7 | ☐9 |
| c. Lung cancer? | ☐1 | ☐2 | ☐7 | ☐9 |
| d. Bladder cancer? | ☐1 | ☐2 | ☐7 | ☐9 |
| e. Stomach cancer? | ☐1 | ☐2 | ☐7 | ☐9 |
| f. Brain cancer? | ☐1 | ☐2 | ☐7 | ☐9 |
| g. Premature birth? | ☐1 | ☐2 | ☐7 | ☐9 |
| h. Bone loss (osteoporosis)? | ☐1 | ☐2 | ☐7 | ☐9 |
| i. Diseases of male reproductive system? | ☐1 | ☐2 | ☐7 | ☐9 |
| j. Erectile dysfunction (impotence)? | ☐1 | ☐2 | ☐7 | ☐9 |
| k. Stomach ulcer? | ☐1 | ☐2 | ☐7 | ☐9 |
| l. Bronchitis? | ☐1 | ☐2 | ☐7 | ☐9 |

**H03.** Based on what you know or believe, does using *smokeless tobacco* cause serious illness?

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

**H02_2.** Do you think that some types of cigarettes *could* be less harmful than other types, or are all cigarettes equally harmful?

COULD BE LESS HARMFUL .... ☐1
ALL EQUALLY HARMFUL ..... ☐2
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**H02_3.** Do you believe cigarettes are addictive?

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

**HK1.** Based on what you know or believe, does smoking hookah cause serious illness??

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

**H04.** Would you favor or oppose a law that would completely prohibit smoking in all indoor workplaces and indoor public places, such as restaurants, bars, and public transportation? Such a law would *not* allow designated smoking areas indoors.

FAVOR ..... ☐1
OPPOSE ..... ☐2
DON'T KNOW ..... ☐7
REFUSED ..... ☐9

**H05.** Would you favor or oppose increasing taxes on tobacco products?

FAVOR ..... ☐1
OPPOSE ..... ☐2
DON'T KNOW .. ☐7
REFUSED ..... ☐9

**H06.** Would you favor or oppose a law prohibiting all advertisements for tobacco products?

FAVOR ..... ☐1
OPPOSE ..... ☐2
DON'T KNOW .. ☐7
REFUSED ..... ☐9

## Section PHW. Pictorial Health Warnings

**PHW1.** In the last 30 days, did you notice any *pictorial* health warnings on cigarette packages?

YES ..... ☐1
NO ..... ☐2→ **SKIP TO NEXT SECTION**
DID NOT SEE ANY CIGARETTE PACKAGES ... ☐3→ **SKIP TO NEXT SECTION**
REFUSED ..... ☐9→ **SKIP TO NEXT SECTION**

**PHW2. [ADMINISTER IF B01 = 1 OR 2. ELSE GO TO NEXT SECTION]**

In the last 30 days, have *pictorial* health warnings on cigarette packages led you to think about quitting?

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

## End Individual Questionnaire

**I00.** Those are all of the questions I have.Thank you very much for partcipating in this important survey.

**I02.** [RECORD ANY NOTES ABOUT INTERVIEW:]

_____

_____

_____

_____

_____

# Appendix F: MPOWER Summary Indicators

**Appendix F: MPOWER Summary indicators, GATS Kazakhstan, 2014.**

| Indicator | Overall | Gender | | Residence | |
|---|---|---|---|---|---|
| | | Male | Female | Urban | Rural |
| **M: Monitor tobacco use and prevention policies** | | | | | |
| Current tobacco use | 22.9 | 43.4 | 4.5 | 25.9 | 19.0 |
| Current tobacco smokers | 22.4 | 42.4 | 4.5 | 25.6 | 18.2 |
| Current cigarette smokers | 22.2 | 42.2 | 4.2 | 25.3 | 18.1 |
| Curect manufactured cigarette smokers | 22.2 | 42.2 | 4.2 | 25.3 | 18.1 |
| Current hand-rolled cigarette smokers | 2.1 | 4.2 | 0.3 | 2.0 | 2.2 |
| Current smokeless tobacco use | 1.3 | 2.8 | 0.0 | 1.1 | 1.6 |
| Average number of cigarettes smoked per day | 14.9 | 15.2 | 11.8 | 13.7 | 17.2 |
| Average age at daily smoking initiation among daily smokers aged 20-34 years | 18.6 | 18.5 | 19.1 | 18.6 | 18.6 |
| Time to first tobacco smoke within 30 minutes from waking | 50.9 | 51.6 | 43.9 | 49.5 | 53.5 |
| Former daily tobacco smokers among ever daily smokers | 12.9 | 12.0 | 20.7 | 12.1 | 14.2 |
| **P: Protect people from tobacco smoke** | | | | | |
| Exposure to secondhand smoke at home at least monthly | 13.8 | 16.7 | 11.4 | 15.5 | 11.5 |
| Exposure to secondhand smoke at work† | 19.0 | 24.7 | 12.9 | 18.0 | 21.1 |
| Exposure to secondhand smoke in public places†: | | | | | |
| Government buildings/offices | 9.9 | 12.5 | 7.8 | 10.1 | 9.7 |
| Health care facilities | 9.7 | 11.3 | 8.8 | 7.5 | 13.1 |
| Restaurants | 27.6 | 32.8 | 22.2 | 22.8 | 35.0 |
| Public transportation | 18.1 | 19.4 | 17.2 | 19.6 | 15.1 |
| **O: Offer help to quit tobacco use** | | | | | |
| Made a quit attempt in the past 12 months (among past year smokers) | 29.5 | 28.9 | 34.3 | 30.7 | 27.4 |
| Advised to quit smoking by a health care provider | 46.6 | 49.8 | 27.9 | 51.4 | 37.1 |

| | | | | | |
|---|---|---|---|---|---|
| Attempted to quit smoking using a specific cessation method: | | | | | |
| Quit without assistance | 76.5 | 77.0 | 72.7 | 79.6 | 70.1 |
| Pharmacotherapy | 23.4 | 21.7 | 35.7 | 27.0 | 16.3 |
| Counseling/advice | 10.2 | 9.3 | 17.1 | 12.0 | 6.7 |
| Interest in quitting smoking | 63.9 | 63.4 | 67.4 | 66.2 | 59.5 |
| **W: Warn about the dangers of tobacco** | | | | | |
| Belief that tobacco smoking causes serious illness | 84.9 | 79.1 | 90.1 | 85.8 | 83.6 |
| Belief that smoking causes stroke | 67.6 | 61.3 | 73.1 | 70.8 | 63.3 |
| Belief that smoking causes heart attack | 67.2 | 60.2 | 73.5 | 72.2 | 60.7 |
| Belief that smoking causes lung cancer | 88.5 | 83.9 | 92.6 | 89.3 | 87.5 |
| Belief that breathing other peoples' smoke causes serious illness | 74.0 | 65.6 | 81.5 | 76.3 | 70.9 |
| Noticed anticigarette smoking information at any location† | 49.5 | 47.1 | 51.7 | 54.0 | 43.7 |
| Thinking of quitting because of health warnings on cigarette packages | 51.3 | 50.8 | 55.5 | 50.7 | 52.5 |
| **E: Enforce bans on tobacco advertising, promotion, and sponsorship** | | | | | |
| Noticed any cigarette advertisement, sponsorship, or promotion† | 25.7 | 26.2 | 25.2 | 28.0 | 22.6 |
| Noticed any cigarette marketing in the stores where cigarettes are sold† | 14.0 | 14.6 | 13.4 | 13.6 | 14.5 |
| **R: Raise taxes on tobacco** | | | | | |
| Average manufactured cigarette expenditure per month (Tenge) | 4 244.5 | 4 420.4 | 2 602.6 | 4 253.2 | 4 227.4 |
| Average cost of a pack of 20 manufactured cigarettes (Tenge) | 221.4 | 222.4 | 207.2 | 237.1 | 196.0 |
| Last manufactured cigarette purchase was in a store | 85.2 | 85.1 | 86.3 | 81.4 | 92.0 |

**Notes**:

† In the last 30 days.

## For notes