



# **SURVEY ON THE USE OF TOBACCO IN THE ADULT POPULATION OF THE REPUBLIC OF CROATIA**



2016

Croatian Institute of Public Health

**SURVEY ON THE USE OF  
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**(Tobacco Questions for Surveys - TQS)**

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## Contents

<b>INTRODUCTION</b> .....	<b>4</b>
<b>METHODOLOGY</b> .....	<b>5</b>
<b>RESULTS</b> .....	<b>8</b>
TOBACCO SMOKING STATUS AND PREVALENCE.....	8
USE OF TOBACCO PRODUCTS .....	12
USE OF SMOKELESS TOBACCO .....	15
EXPOSURE TO SECONDHAND SMOKE .....	15
ADVICE TO QUIT SMOKING .....	18
NOTICING ANTI-CIGARETTE SMOKING INFORMATION.....	19
NOTICING CIGARETTE ADVERTISEMENTS .....	21
EXPENDITURES FOR BUYING CIGARETTES.....	22
<b>CONCLUSIONS</b> .....	<b>23</b>
<b>ATTACHMENT</b> .....	<b>25</b>

## **SURVEY ON THE USE OF TOBACCO IN THE ADULT POPULATION OF THE REPUBLIC OF CROATIA (Tobacco Questions for Surveys - TQS)**

### **INTRODUCTION**

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Smoking is a preventable cause of premature death and morbidity worldwide. Every year in the world over 5 million people die from diseases caused by smoking. One of the key components of a comprehensive global control of tobacco use is the establishment of effective and systematic research that would enable obtaining of the comparable data.

The World Health Organization (WHO) and the Center for Disease Control and Prevention (CDC - Atlanta, USA) with the help of partners launched the implementation of the Global Tobacco Surveillance System (GTSS) to stimulate countries, on the basis of the data obtained, to develop control programs of tobacco use. Global Tobacco Surveillance System (GTSS) includes collecting data using three surveys focused on young people: Global Youth Tobacco Survey (GYTS - in Croatia was conducted in 2003, 2007, 2011, and is currently being conducted in 2015/2016.), Global Health Professionals Student Survey (GHPSS - in Croatia pilot project in 2005 and 2011), Global School Personnel Survey (GSPS)

and survey oriented to adult population Global Adult Tobacco Survey (GATS).

Global Adult Tobacco Survey, a survey conducted in many countries around the world, allows getting comparable data on the use of tobacco products among adults from different continents and from different cultural environments. Countries can conduct this survey as independent research in whole or may choose modulus i.e. a set of questions called "Tobacco Questions for Surveys" and include them in another national survey.

The second wave of The European Health Interview Survey (EHIS 2) was conducted in Croatia in 2014/2015. In order to additionally investigate the use of tobacco products, questions "Tobacco Questions for Surveys" were included in this national survey. Research was conducted by Croatian Institute of Public Health in cooperation with network of county institutes, Croatian Bureau of Statistics, Ministry of Health, and with the assistance of WHO-Regional office for Europe and the WHO Country Office, Croatia.

## **METHODOLOGY**

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In this survey, the target population was all persons aged 15 years and older living in private households on the territory of the

Republic of Croatia. Persons living in collective households (homes, boarding schools, convents, hospitals, etc.) were not included in the survey.

The sample frame was based on the data from Census of Population, Households and Dwellings 2011, and the sample was prepared in the Central Bureau of Statistics. Sample design was a two-stage stratified. Dwellings were selection units of the sample for this survey. Each dwelling contained one or more households. There were 3140 households selected in the sample, and within the selected households all individuals who were at least 15 years old at the time of the survey were interviewed.

European Health Interview Survey and associated TQS module were carried out from April 2014 to March 2015, using the method of a face-to-face interview with paper-and-pencil (PAPI).

All respondents received to their home addresses a letter of invitation in which they were asked to participate in a survey. Respondents were contacted by interviewers with previous experience in conducting surveys and specially trained through a one-day seminar (a total of 81 interviewers). Coordinators and supervisors from county and City of Zagreb Public Health Institutes (1-3 depending on the size of the county) were appointed and they also completed a one-day seminar. All interviewers signed a

statement of statistical confidentiality, and respondents signed an agreement for the interview before the interviewing started. Since the survey was conducted in population aged 15 years and older (on the day of the interview the person had to be at least 15 years of age), for those who were underage, respondent's consent was signed by a parent or guardian.

The questionnaire "Tobacco Questions for Surveys" contains 22 questions, three questions relating to the status and the prevalence of smoking, i.e. measure the prevalence of smoking in the population. Other issues related to the use of tobacco products, the use of smokeless tobacco, exposure to cigarette smoke, advice on smoking cessation, perception of information against smoking, perception of promotion of cigarettes and issues related to the costs of purchasing cigarettes.

The obtained data can be used for assessment and monitoring of existing policies and tobacco control programmes, as well as for planning and implementation of new intervention programmes at the national level and in the local community.

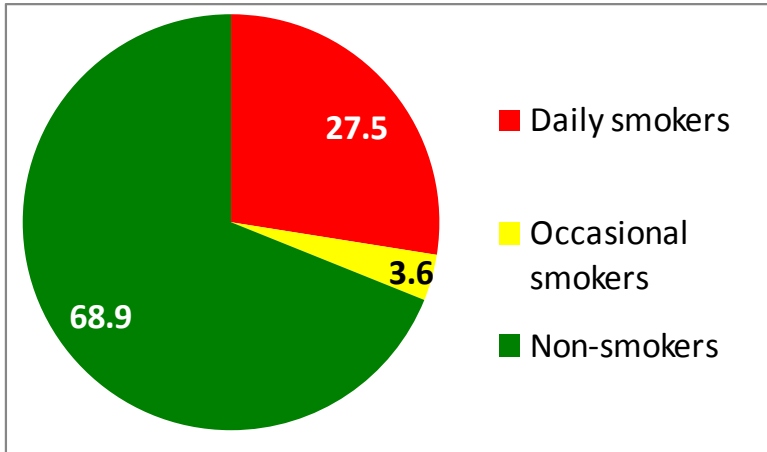


## RESULTS

### TOBACCO SMOKING STATUS AND PREVALENCE

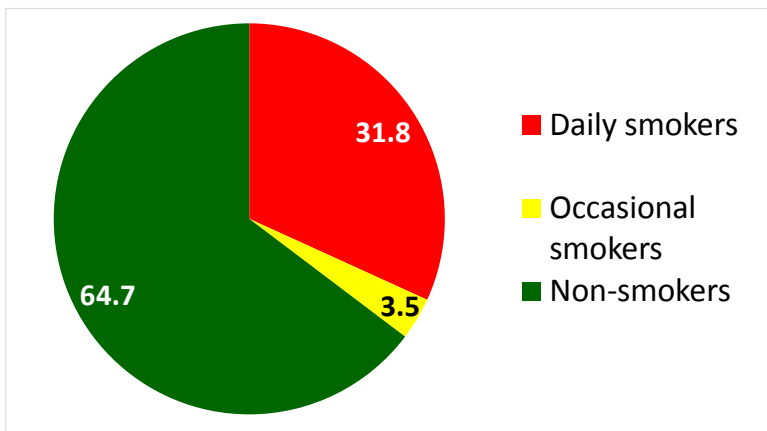
According to the TQS results 31.1% of population in Croatia are smokers (27.5% are daily smokers and 3.6% occasional smokers - Figure 1).

Figure 1. Current smoking status (%)

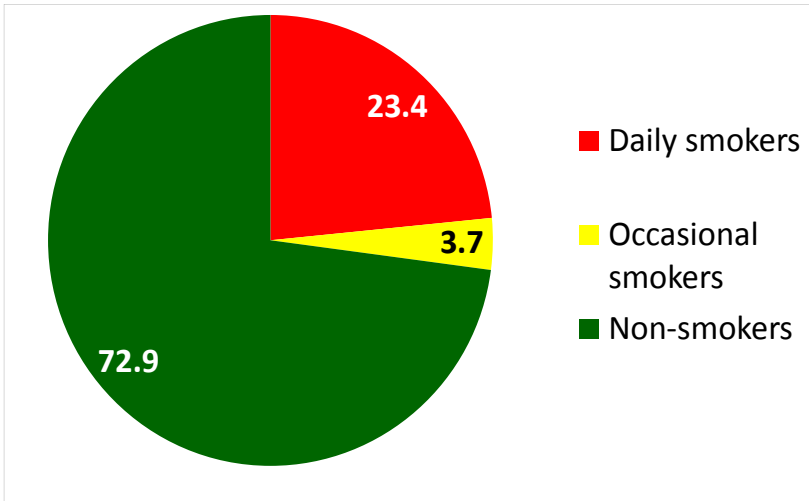


There are 35.3% smokers among men (31.8% daily smokers and 3.5% occasional smokers - Figure 2), while among women there are 27.1% smokers (23.4% daily smokers and 3.7% occasional smokers - Figure 3).

Figure 2. Current smoking status – men (%)

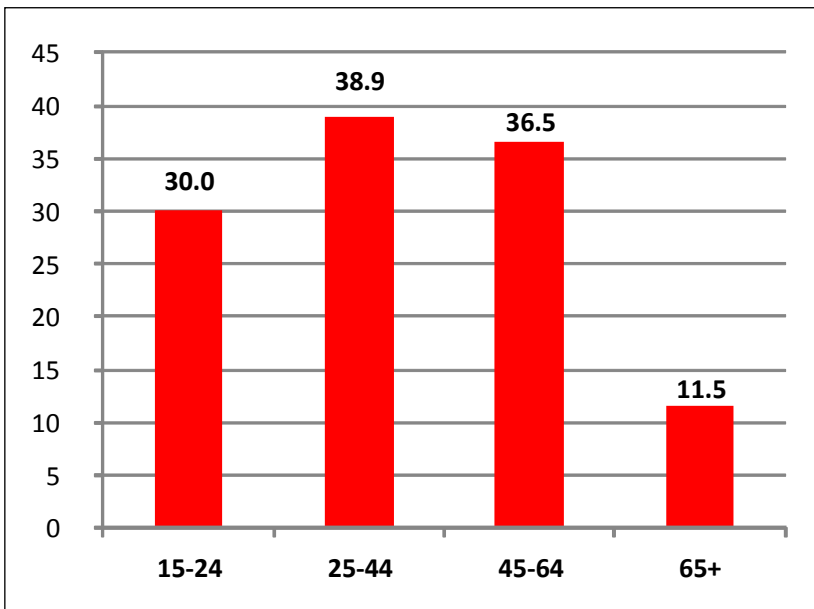


**Figure 3. Current smoking status - women (%)**



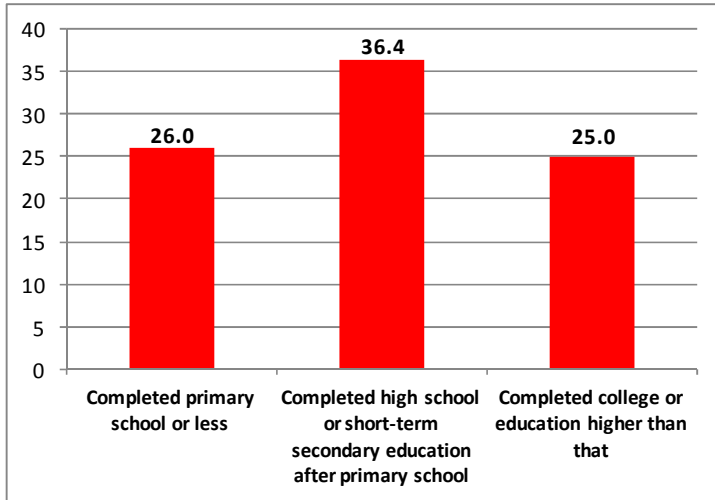
According to the age, the share of smokers is the highest in the age group 25-44 years (38.9%), followed by the age group 45-64 years (36.5%), 15-24 years (30.0%) and 65+ years (11.5%) – Figure 4.

**Figure 4. Current smoking status according to the age (%)**



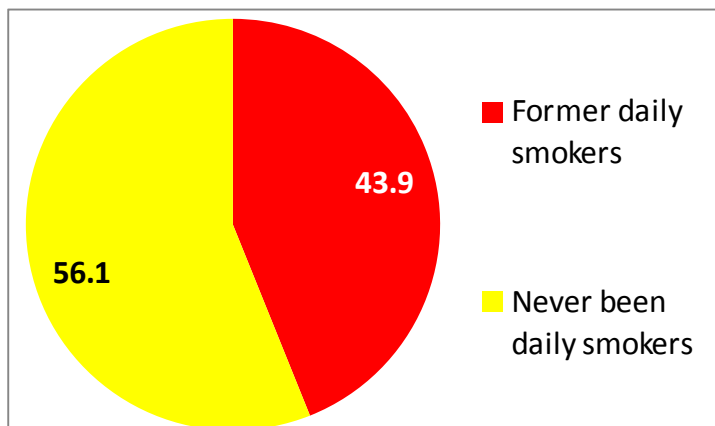
According to the educational level, share of smokers is the highest among respondents with completed high school or short-term secondary education after primary school (36.4%), followed by respondents with completed primary school or less (26.0%) and respondents with completed college or education higher than that (25.0%) - Figure 5.

**Figure 5. Current smoking status according to the educational level (%)**



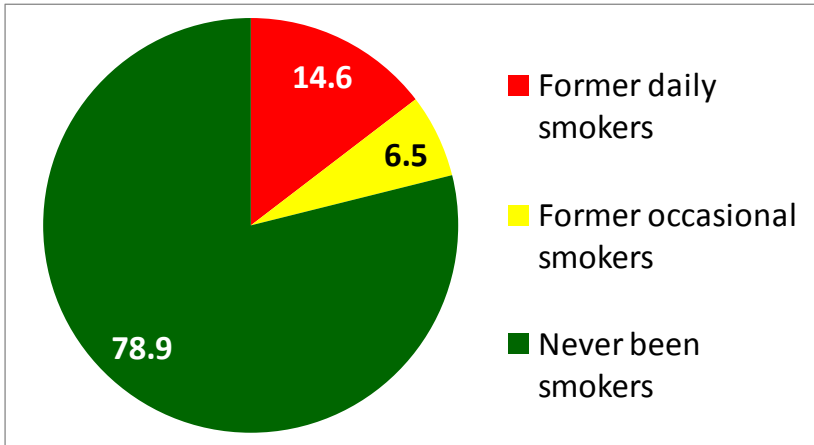
Out of occasional smokers, 43.9% are former daily smokers, while 56.1% have never been daily smokers (Figure 6).

**Figure 6. Former smoking status – occasional smokers (%)**



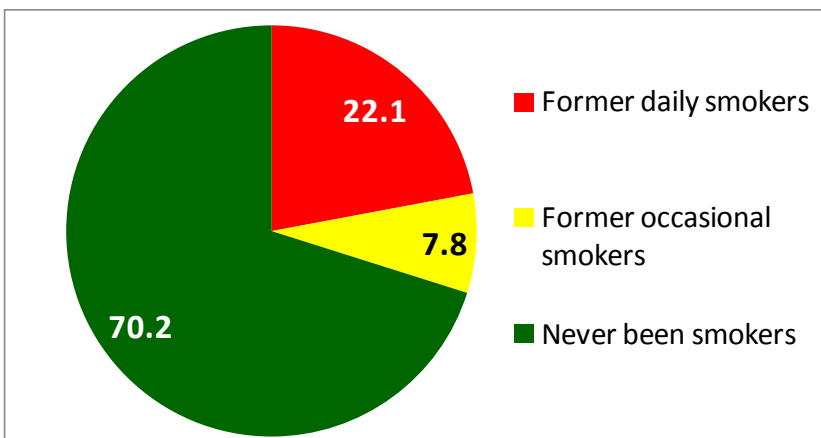
Out of non-smokers, 21.1% are former smokers (14.6% are former daily smokers, while 6.5% are former occasional smokers - Figure 7).

**Figure 7. Former smoking status – non-smokers (%)**

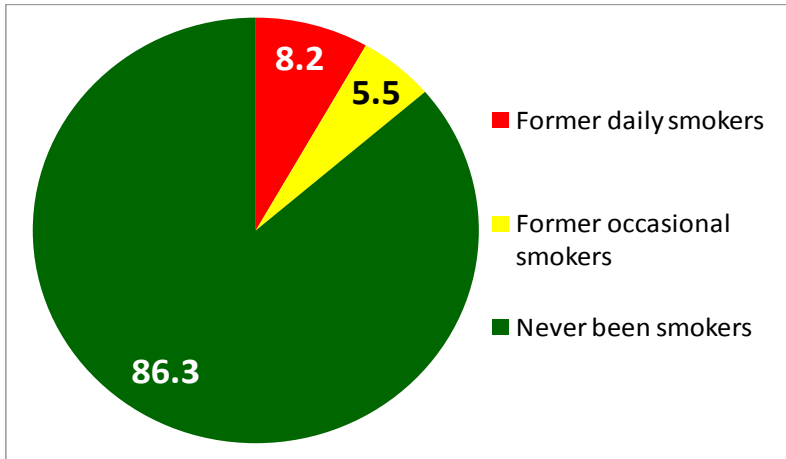


Among male non-smokers, 29.8% are former smokers (22.1% are former daily smokers and 7.8% are former occasional smokers - Figure 8), while among female non-smokers, 13.7% are former smokers (8.2% are former daily smokers and 5.5% are former occasional smokers - Figure 9).

**Figure 8. Former smoking status – non-smokers – men (%)**



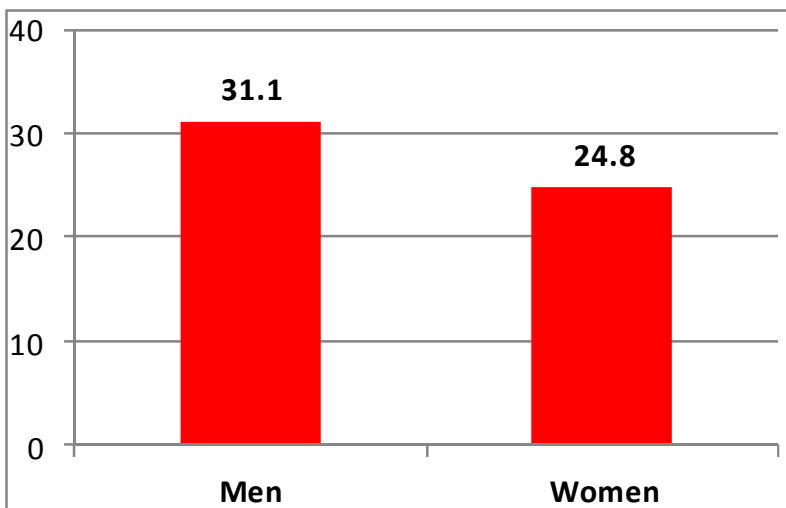
**Figure 9. Former smoking status – non-smokers – women (%)**



## USE OF TOBACCO PRODUCTS

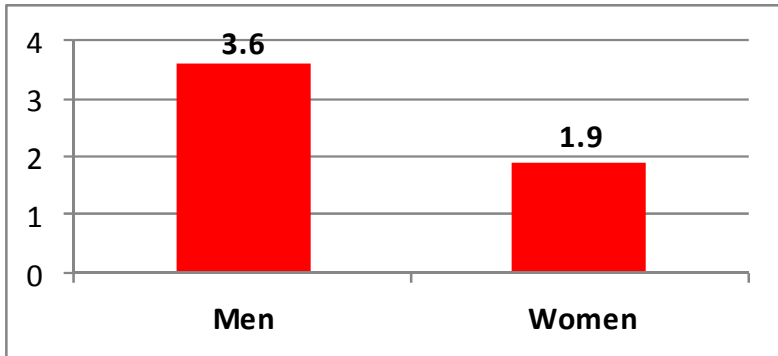
Concerning tobacco products, 27.8% of all respondents smoke manufactured cigarettes (among men this share is 31.1% and among women 24.8% - Figure 10).

**Figure 10. Use of manufactured cigarettes – all respondents (%)**



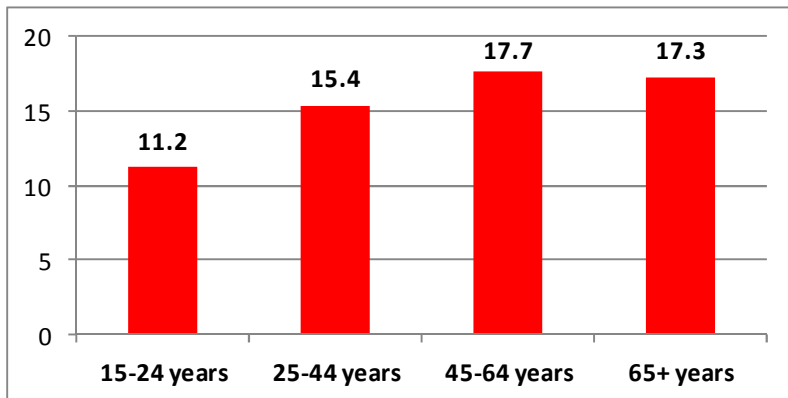
Hand-rolled cigarettes are smoked by 2.7% of all respondents (among men this share is 3.6% and among women 1.9% - Figure 11).

**Figure 11. Use of hand-rolled cigarettes – all respondents (%)**



Number of manufactured cigarettes smoked on average per day among those respondents who smoke at least one cigarette per day or more, is 15.9% (among men 18.9% and among women 12.6%). According to the age, smokers in age group 15-24 years smoke 11.2 cigarettes on average per day, in age group 25-44 years 15.4 cigarettes a day, in age group 45-64 years 17.7 and in age group 65+ 17.3 cigarettes per day (Figure 12).

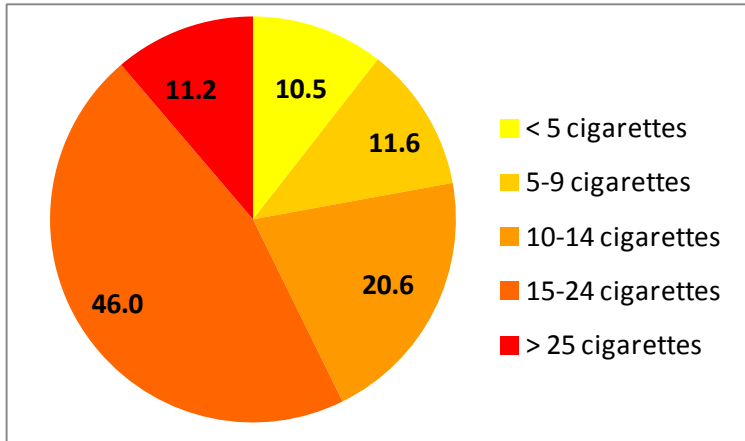
**Figure 12 – Average number of manufactured cigarettes smoked per day - smokers**



If smokers are divided into groups according to the average number of cigarettes smoked per day, the largest share has the group with 15-24 cigarettes smoked per day (46.0%), followed by the group with 10-14

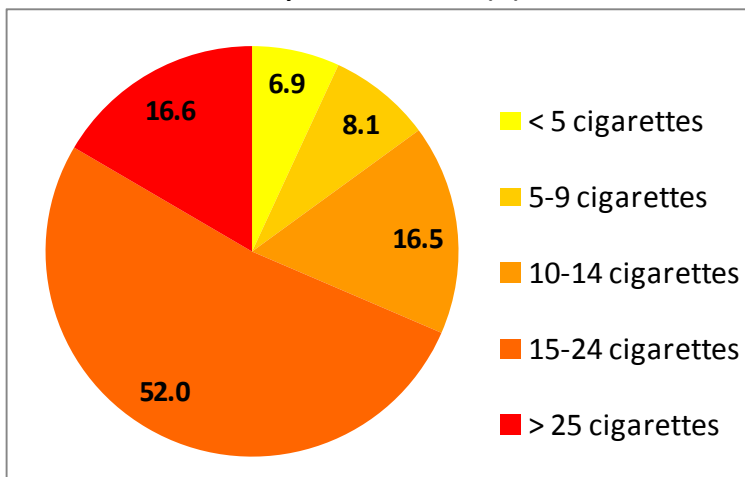
cigarettes smoked per day (20.6%), the group with 5-9 (11.6%), 25 and more (11.2%) and less than 5 (10.5%) cigarettes smoked per day (Figure 13).

**Figure 13. Share of groups according to the number of cigarettes smoked per day - smokers (%)**



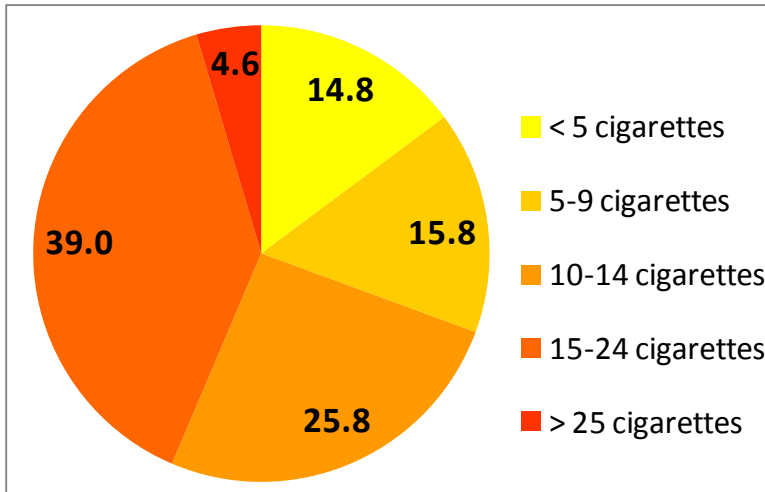
Among men the highest share has the group with 15-24 cigarettes smoked per day (52.0%), followed by the group with 25 and more cigarettes smoked per day (16.6%), the group with 10-14 (16.5%), 5-9 (8.1%) and less than 5 (6.9%) cigarettes smoked per day (Figure 14).

**Figure 14. Share of groups according to the number of cigarettes smoked per day - smokers - men (%)**



Among women the highest share also has the group with 15-24 cigarettes smoked per day (39.0%) followed by the group with 10-14 cigarettes smoked per day (25.8%), 5-9 (15.8%), less than 5 (14.8%) and 25 and more cigarettes smoked per day (Figure 15).

**Figure 15. Share of groups according to the number of cigarettes smoked per day - smokers – women (%)**



### **USE OF SMOKELESS TOBACCO**

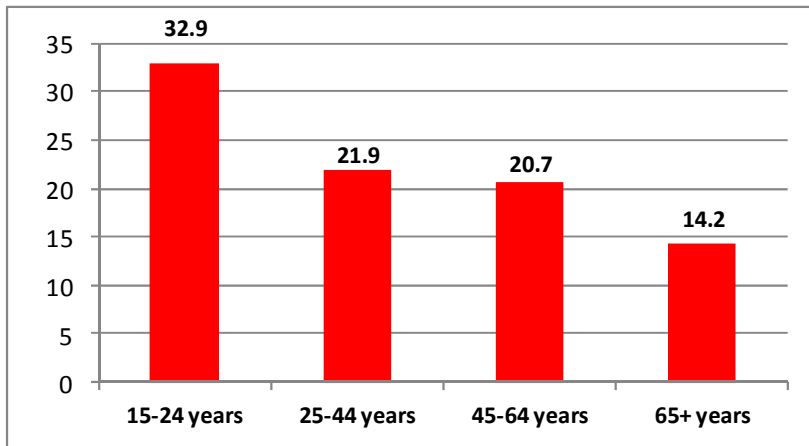
Only 0.6% of respondents use smokeless tobacco.

### **EXPOSURE TO SECONDHAND SMOKE**

Out of non-smokers, 21.0% are exposed to the tobacco smoke in their home, equally men (20.0%) and women (21.9%). However, according to the age, the most exposed to the tobacco smoke in their home are non-smokers in the youngest age group 15-24 years (32.9%), followed by the age groups 25-44 years (21.9%), 45-64 years (20.7%) and 65+ years (14.2%) – Figure 16.

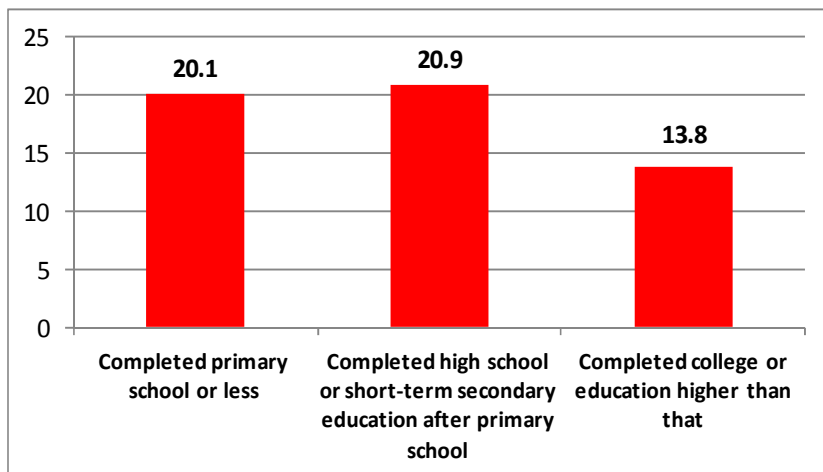


**Figure 16. Exposure to tobacco smoke at home – non-smokers according to the age (%)**



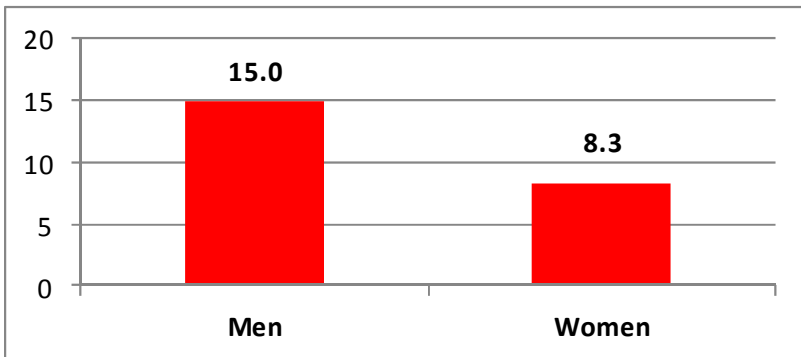
According to the educational level, respondents non-smokers with completed college or education higher than that were less exposed to tobacco smoke at home (13.8%) compared to the respondents non-smokers with completed primary school or less (20.1%) and respondents with completed high school or short-term secondary education after primary school (20.9%) – Figure 17.

**Figure 17. Exposure to tobacco smoke at home – non-smokers according to the educational level (%)**



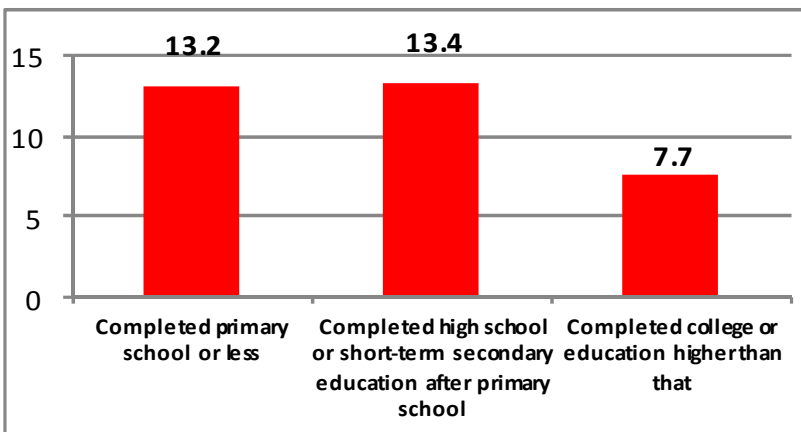
Concerning exposure to tobacco smoke at work, 11.7% respondents non-smokers who work at least part of their worktime indoors, stated that someone smoked in their workplace during last 30 days. Among men this percentage was 15.0% and among women 8.3% (Figure 18).

**Figure 18. Exposure to tobacco smoke at work – non-smokers according to the gender (%)**



According to the educational level, respondents non-smokers with completed college or education higher than that were less exposed to tobacco smoke at work (7.7%) compared to the respondents non-smokers with completed primary school or less (13.2%) and respondents with completed high school or short-term secondary education after primary school (13.4%) – Figure 19.

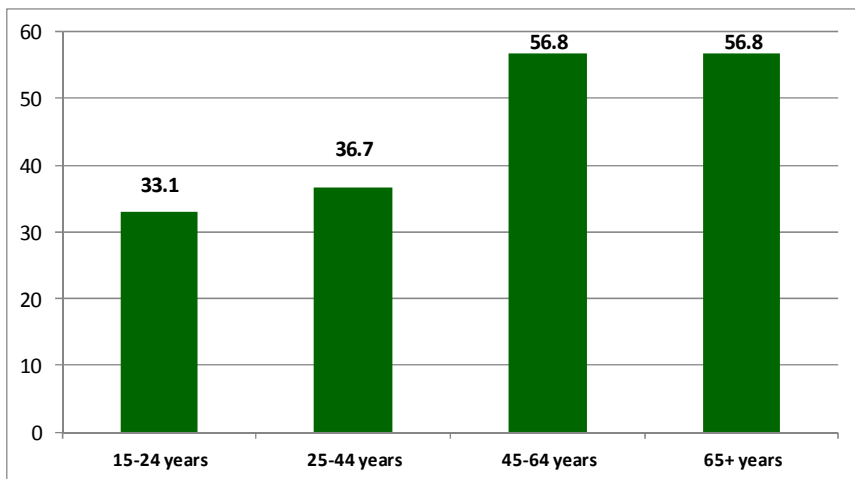
**Figure 19. Exposure to tobacco smoke at work – non-smokers according to the educational level (%)**



## ADVICE TO QUIT SMOKING

Among current smokers who visited a health care provider during the past 12 months, 47.0% was advised to quit by health care provider, evenly men (45.3%) and women (48.7%). This percentage increases according to the age and is the highest in age groups 45-64 years and 65+ years (Figure 20).

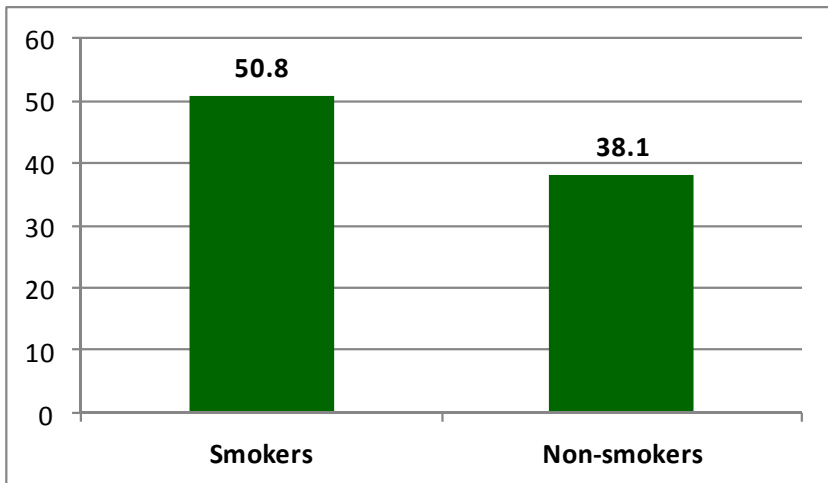
**Figure 20. Share of respondents who were advised to quit among smokers who visited a health care provider during the past 12 months according to age (%)**



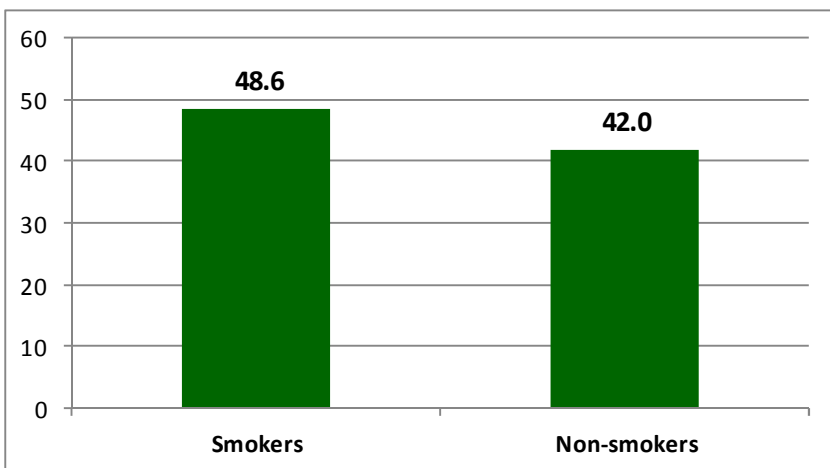
## NOTICING ANTI-CIGARETTE SMOKING INFORMATION

Higher percentage of smokers than non-smokers noticed anti-cigarette smoking information in newspapers or magazines (50.8% smokers vs. 38.1% non-smokers) and in television (48.6% smokers vs. 42.0% non-smokers) during the last 30 days - Figures 21 and 22.

**Figure 21. Noticing anti-cigarette smoking information in newspapers and magazines during last 30 days (%)**

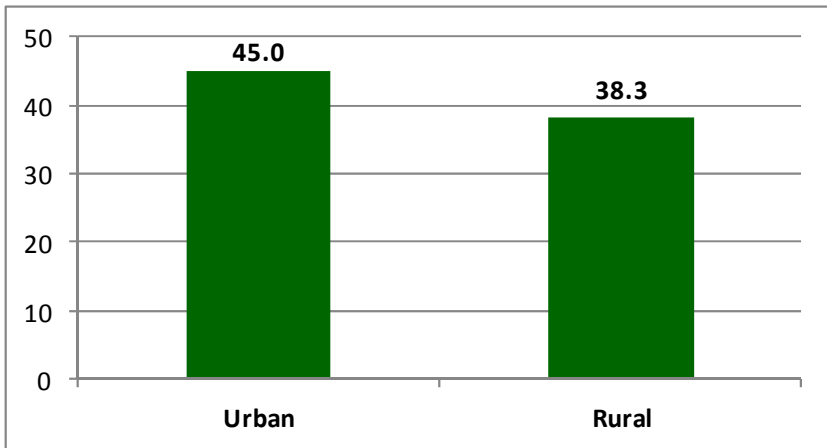


**Figure 22. Noticing anti-cigarette smoking information in television during last 30 days (%)**



Noticing anti-cigarette smoking information in newspapers or magazines during the last 30 days was different according to the urban or rural residence of the respondent – 45.0% respondents with urban residence and 38.3% respondents with rural residence noticed anti-cigarette smoking information in newspapers or magazines (Figure 23).

**Figure 23. Noticing anti-cigarette smoking information in newspapers and magazines during last 30 days according to the urban or rural residence of the respondent (%)**

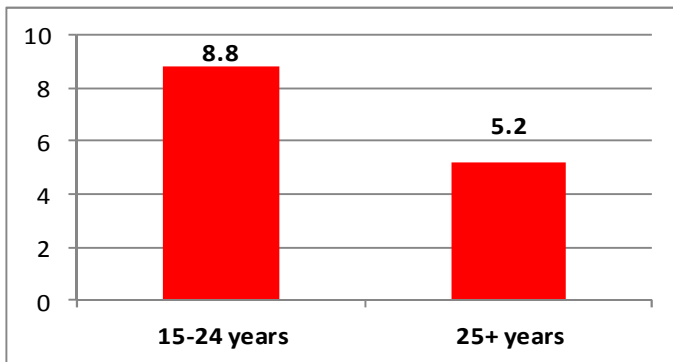


Among smokers 94.4% noticed health warnings on cigarette packs, evenly men (93.4%) and women (95.4%). Percentage of smokers who thought about quitting smoking because of the warnings on cigarette packs was 26.9%, among men 25.1% and among women 28.8%.

## NOTICING CIGARETTE ADVERTISEMENTS

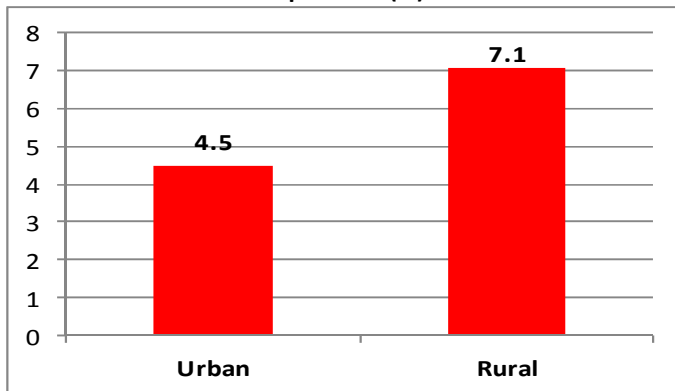
Advertisements or signs promoting cigarettes in stores where cigarettes are sold were noticed in the last 30 days by 5.7% of all respondents (6.0% of men and 5.4% of women). Cigarette advertisements were noticed by 8.8% of respondents younger than 25 years and 5.2% of respondents aged 25 and more (Figure 24).

**Figure 24. Noticing advertisements or signs promoting cigarettes in stores where cigarettes are sold according to the age (%)**



Noticing advertisements or signs promoting cigarettes was different according to the urban or rural residence of the respondent – 4.5% respondents with urban residence and 7.1% respondents with rural residence noticed such advertisements (Figure 25).

**Figure 25. Noticing advertisements or signs promoting cigarettes in stores where cigarettes are sold according to the urban or rural residence of the respondent (%)**



Out of other forms of cigarette promotion, 1.9% respondents noticed in the last 30 days clothing or other items with a cigarette brand name or logo. All other forms of cigarette promotion (free samples of cigarettes, cigarettes at sale prices, coupons for cigarettes, free gifts or special discount offers on other products when buying cigarettes, cigarette promotions in the mail) were noticed by less than 0.5% respondents.

### **EXPENDITURES FOR BUYING CIGARETTES**

Average cost of a pack of manufactured cigarettes (containing 20 cigarettes) calculated according to the WHO methodology in local currency was 21.49 HRK.

Average costs of 100 packs of manufactured cigarettes (20 cigarettes per pack) as percentage of Gross Domestic Product (GDP) per capita was 2.77%.

## CONCLUSIONS

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1. According to the TQS results, 31.1% of population in Croatia are smokers (27.5% daily smokers and 3.6% occasional smokers).
2. There are 35.3% smokers among men and 27.1% smokers among women.
3. The share of smokers is the highest in the age group 25-44 years (38.9%) and the lowest in the age group 65+ years (11.5%).
4. According to the educational level, share of smokers is the highest among respondents with completed high school or short-term secondary education following primary school (36.4%).
5. Out of non-smokers, 21.1% are former smokers.
6. Among male non-smokers, 29.8% are former smokers, while among female non-smokers, 13.7% are former smokers.
7. Number of manufactured cigarettes smoked on average per day among those respondents who smoke at least one cigarette per day or more, is 15.9.
8. Number of manufactures cigarettes smoked on average per day among male smokers is 18.9 and among female 12.6.
9. According to the age, smokers in age group 15-24 years smoke the lowest number of manufactured cigarettes on average per day (11.2), while smokers in age group 45-64 years smoke the highest number (17.7).
10. The highest share of smokers smokes 15-24 cigarettes per day.
11. Only 0.6% of respondents use smokeless tobacco.
12. Out of non-smokers, 21.0% are exposed to the tobacco smoke at home.
13. According to the age, the most exposed to the tobacco smoke in their home are non-smokers in the age group 15-24 years (32.9%).

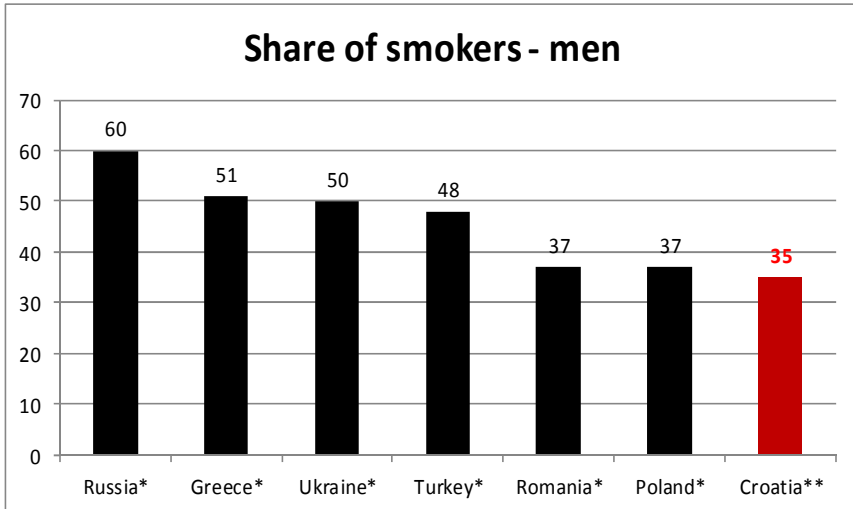


14. According to the educational level, non-smokers with completed college or education level higher than that, were the least exposed to tobacco smoke at home (13.8%).
15. Out of non-smokers who work at least part of their worktime indoors, 11.7% were exposed to tobacco smoke at their workplace, more men (15.0%) than women (8.3%).
16. According to the educational level, respondents with completed college or education higher than that were the least exposed to tobacco smoke at work (7.7%).
17. Among current smokers who visited a health care provider during the past 12 months, 47.0% were advised to quit, mostly those in age groups 45-64 years and 65 years and older.
18. Among smokers, 94.4% noticed health warnings on cigarette packs and 26.9% thought about quitting smoking because of these warnings.
19. Advertisements or signs promoting cigarettes in stores where cigarettes are sold were noticed in the last 30 days by 5.7% of respondents.
20. Average cost of a pack of manufactured cigarettes (containing 20 cigarettes) calculated according to the WHO methodology in local currency was 21.49 HRK.

## ATTACHMENT

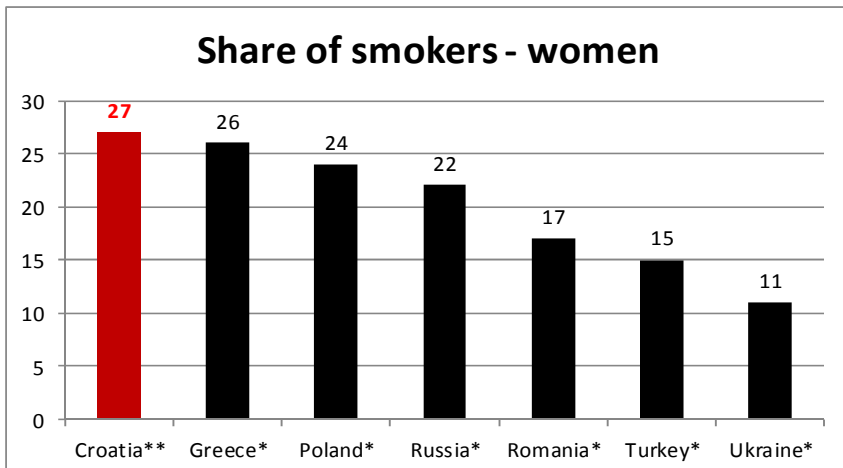
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Comparison of share of smokers with other European countries which conducted Global Adult Tobacco Survey in period 2008-2013



\* Source of data: Global Adult Tobacco Survey Atlas, 2015

\*\* Source of data: Tobacco Questions for Surveys, 2014/15



\* Source of data: Global Adult Tobacco Survey Atlas, 2015

\*\* Source of data: Tobacco Questions for Surveys, 2014/15