



# Tobacco Control in Ukraine

The National report



**Ministry of Health of Ukraine**

## ABSTRACT

This report describes the status of tobacco control and tobacco control policies in Ukraine in mid-2008. It reviews progress following the adoption of national tobacco control legislation in 2005, and establishes a baseline for monitoring the implementation of the WHO Framework Convention on Tobacco Control (ratified in 2006) and the national tobacco control programme, which is being prepared by the government. The document presents an overview of the situation regarding tobacco use and related harm in Ukraine and policy responses and implementation of tobacco control measures at national and local levels.

### Keywords

SMOKING – adverse effects – prevention and control  
HEALTH POLICY  
HEALTH PROMOTION  
TOBACCO – legislation  
TOBACCO INDUSTRY– legislation  
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The authors hope that this report will be the first in a series of annual reports, to be prepared within the framework of implementation of the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population of Ukraine for 2008–2012.



## Preface

In recent years the Ministry of Health of Ukraine has been paying more attention to tobacco control. Following an initiative by the President, the Ministry has developed the Concept of the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population of Ukraine for 2008–2012, which was approved by the Government in June 2008.

The Ministry fully supports the implementation of the WHO Framework Convention on Tobacco Control (FCTC), which was ratified by Ukraine in 2006. Both the Concept of the National Programme and the FCTC stress the importance of monitoring the tobacco control situation, which is critical to understanding and reversing the tobacco epidemic in Ukraine.

This national report is a milestone in monitoring policies addressing the use of tobacco and prevention of such use in Ukraine. It gives both the authorities and the general public a comprehensive picture of how the tobacco epidemic is harming the country, and helps them to see the most necessary ways to stop this epidemic. The conclusions of the report are based on the best international experience of tobacco control and propose effective policies tailored to the country's current needs. The Ministry of Health will work for the implementation of the National Programme, including the establishment of an effective national monitoring system to assess the effectiveness of the tobacco control measures implemented, in line with the provisions of the FCTC.

This national report demonstrates that to stop the tobacco epidemic a multisectoral approach is needed, mobilizing different government sectors and civil society efforts under the leading role of the public health sector. Health professionals can see both the first signs of the impact of tobacco use on human health and the final consequences of this deadly habit. To prevent this lethal outcome, health professionals have the opportunity to help people change their behaviour. They should also act as role models for their patients by ceasing to smoke themselves and by ensuring that their workplaces and public facilities are smoke-free. Another important role for health professionals is to introduce effective tobacco control policies to the authorities and the public at national and local level and encourage them to implement these policies.

This first National Report on Tobacco Control in Ukraine gives health professionals and the population in Ukraine another chance to look closely at tobacco-related harm and to join those people who already work to prevent and eliminate such harm. I do believe that in the second National Report we will be able to read much more about the various effective tobacco control activities to be implemented in the coming years, which will allow us to state that the tobacco epidemic in Ukraine has been reversed.

Dr Vasyl Knyazevich  
Minister of Health of Ukraine



## Executive summary

Since 1991, there have been more deaths than births in Ukraine, leading to a fall in the size of the population.

The proportion of tobacco-related diseases in overall mortality is rather high. In 2000, the total number of tobacco-related deaths was about 100 000, or 13% of total mortality. Most tobacco-related deaths (70%) occurred in the group aged 35–69 years, and the mean number of years of life lost per death from smoking at that age was equal to 19 years.

The available data on smoking in the adult population show a general upward trend in smoking prevalence, especially among women. In 2005, female smoking prevalence reached 20%. According to different data, smoking in men may be either still on the rise or have stabilized, at least in some sociodemographic groups, but the observed stabilization was achieved at an extremely high level compared to other countries. In 2005, smoking prevalence among the male population was the highest in the WHO European Region – 67%. Total smoking prevalence for the population aged 15+ years is 41% (daily and occasional smokers). Smoking prevalence is substantially higher in the east of the country compared with the west.

Most smokers want to stop smoking and have already tried to do so. The proportion of former smokers is, however, low at only 9% of the adult population. Among male smokers, the proportion of those who wish to stop smoking and those who have already tried to do so is showing a rising trend.

While some trends towards a reduction in smoking rates among 15-year-olds have been observed in recent years, no such trends are visible for 12-year-olds. The surveys revealed that young people are starting to smoke at ever younger ages, especially girls, who are more likely to smoke regularly and develop nicotine dependence.

Smoking prevalence among health professionals is only slightly lower than in the general population with university education, as no incentives are provided to help them stop smoking. The introduction of tobacco control measures in medical schools and health care institutions could encourage health professionals both to stop smoking and to advise patients on stopping smoking.

Over half the population (53%) is exposed to tobacco smoke at least daily. When exposure to tobacco smoke on several days a week is taken into account as well, 74% of former smokers and 65% of non-smokers report being so exposed. The population cannot protect themselves from exposure to tobacco smoke. Smoke-free policies in work- and public places can ensure such protection. Such policies have strong support in the general population.

In the 1990s, the annual consumption of cigarettes was about 60–70 billion pieces, rising after 2000 to 80–90 billion cigarettes. Legal sales of cigarettes (production+import–export) were 116 billion in 2005–2006, while consumption was much lower, meaning that about 30 million

cigarettes were first sold in Ukraine and then illegally exported, predominantly to European Union countries.

In 1999–2006, the real (inflation-adjusted) prices for tobacco products fell by 30%. The proportion of tobacco excise taxes in total government tax revenues fell from 3.9% in 1999 to 1.6% in 2007, despite an increase in cigarette production.

The general foreign trade balance for tobacco is negative and over the period 1996–2007 the country lost almost US\$ 2 billion as a result.

The cultivation of tobacco has declined each year. In 2006, 340 tons of raw tobacco were produced, equal to 1.2% of the 1987 level. In 2007, 128 billion cigarettes were produced in Ukraine. Total employment in tobacco factories fell by 38% between 1996 and 2006, while total cigarette production during the same period increased 2.7-fold.

The current tobacco control policy is defined in the Concept of the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population in Ukraine for 2008–2012, approved by the government on 4 June 2008.

In 2005, the Law on Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on the Health of the Population was adopted.

On 15 March 2006, Parliament ratified the WHO Framework Convention on Tobacco Control (FCTC), which entered into force on 4 September 2006.

Tobacco advertising is regulated by the Law on Advertising. At present, tobacco advertising is banned on television and radio, on transport vehicles, in shops and through advertising activities such as some forms of sponsorship, campaigns, competitions and so on. Tobacco advertising out of doors is to be banned from 2009 and in the print media from 2010.

According to Article 13 of the FCTC, Ukraine is to enact appropriate legislative and other measures for a comprehensive ban on all tobacco advertising, promotion and sponsorship.

The majority of the population support a ban on tobacco advertising. Between 2000 and 2005, increasing numbers of people were in support of a ban.

Since late 1999, taxes have been stabilized, with only small increases in tax rates, usually below the rate of inflation. Current tobacco excise tax rates are very low. They should be raised as soon as possible, and then increased annually by an amount above inflation. The new taxation system should contribute to a reduction in smoking as well as to European integration, by establishing tax rates not lower than in the Russian Federation. Meeting all these challenges will ensure a substantial increase in the government's tax revenues.

The law adopted in 2005 introduced some measures to protect people from harmful exposure to tobacco smoke in work- and public places.

Enforcement of smoke-free provisions is still poor. In recent years, some local authorities have adopted resolutions which allow increasing protection from tobacco smoke in their communities.

For the provisions and guidelines of the FCTC to be implemented, some amendments to current legislation are needed along the following lines.

- As there is no safe level of exposure to tobacco smoke, work- and public places should be made 100% smoke-free.
- Legislation on protection from exposure to tobacco smoke should cover all work- and public places and all types of public transport.
- Legislation should identify the authorities responsible for enforcement, and should include a system for monitoring compliance and prosecuting violators.
- Legislation should specify penalties for violations sufficient to act as a deterrent. Some government resources are needed for public education and for enforcement of the legislation.

Since 1 January 2007, health warnings have been covering not less than 30% of the external surface of each of the larger surfaces of tobacco product packaging, and cigarette packs no longer bear misleading words such as “lights”.

To improve the provision of information to consumers of tobacco products, it is proposed to increase the size and number of health warnings and to add graphics to them.

According to the Law, the Ministry of Health should define and publish annually the list of substances and ingredients considered harmful to human health that are present in tobacco products and in their emissions.

Information regarding aid to help people stop smoking tends to be contradictory. On the one hand, over 80% of physicians report that they typically advise to their patients to stop smoking. On the other hand, during the national tobacco use survey, 69% of smokers reported that they had never received any such intervention from a health professional. The same survey showed that more than a million smokers are willing to use assistance from a medical doctor or other cessation specialist or to use medicines. However, the narcological service reports from 16 regions show that such help was only provided to a little more than 10 000 people.

The school programme called “The basics of life safety” makes a primary contribution to the prevention of tobacco use through the information it provides on the harmful impact on health of tobacco. However, in the curriculum the negative impacts on health of tobacco-smoking, alcohol, narcotics and toxic substances are considered together, and there are no separate themes on the harm from tobacco-smoking in the programme. The curricula for the education and postgraduate education of health and social workers include the provision of information on tobacco as a risk factor for some diseases. A special tobacco control course should be introduced in educational institutions including both knowledge about tobacco-related harm and skills for advising patients on giving up smoking.

Several research institutes and universities are involved in tobacco control research. At least 150 research papers and books have been published recently, and 11 dissertations have related to tobacco control issues.

Nongovernmental organizations conduct various tobacco control activities. They have recently been active in influencing tobacco control policies at local level and encouraging local authorities to take more active positions on these issues.

The development of tobacco control policy is currently at a turning point. On the one hand, smoking prevalence has increased in recent years and reached very high rates. On the other hand, the ratification of the FCTC and adoption of tobacco control legislation combined with initiatives by the President and government have established favourable conditions for determined tobacco control policies to reduce tobacco-related deaths and the burden of disease. The organizational framework for such policies should be found in the adoption of, and provision of necessary resources for, the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population in Ukraine for 2008–2012.

## Introduction

Tobacco is the second major cause of death in the world, currently responsible for the deaths of 1 in 10 adults worldwide (about five million deaths each year). If current smoking patterns continue, it will cause some eight million deaths each year by 2030. Unless urgent action is taken, tobacco could kill one billion people during this century.

Tobacco is the fourth most common risk factor for disease worldwide. The economic costs of tobacco use are equally devastating. In addition to the high public health costs of treating tobacco-related diseases, tobacco kills people at the height of their productivity, depriving families of breadwinners and nations of a healthy workforce.

Experience has shown that there are many cost-effective tobacco control measures that can be used in different settings and can have a significant impact on tobacco consumption. The most cost-effective strategies are population-wide public policies, such as bans on direct and indirect tobacco advertising, tobacco tax and price increases, smoke-free environments in all work- and public places and other measures which are stated in the provisions of the WHO Framework Convention on Tobacco Control (FCTC).

Two trends are observable in tobacco control. On the one hand, in recent years smoking prevalence in Ukraine, unlike in most developed countries, has been increasing. On the other hand, both the public and the authorities have become more aware of the harm related to tobacco and the need for tobacco control measures. In 2005, the Law on Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on the Health of the Population was adopted (called in this report “the tobacco control law”). In 2006, Ukraine ratified the FCTC, which is a binding international agreement.

On 2 June 2007, the President sent an official letter to the Prime Minister regarding the need to strengthen tobacco control efforts and, in particular, suggested that she should “consider the possibility of developing a governmental programme aimed at reduction of the harmful tobacco impact on the population health”. This Presidential initiative was welcomed by the government, and on 4 June 2008, the government approved the Concept of the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population of Ukraine for 2008–2012.

The purpose of the present report is threefold:

- to describe the situation regarding tobacco consumption and tobacco-related problems on the one hand, and tobacco control policies on the other, as at mid-2008;
- to establish a baseline for monitoring progress through the implementation of the National Programme for Reducing the Harmful Impact of Tobacco on the Health of the Population of Ukraine for 2008–2012;
- to make recommendations on the development of tobacco control policies.

## 1. General information on Ukraine

### Population

With 603 500 km<sup>2</sup>, Ukraine is the second largest country in Europe after the Russian Federation. By population size it comes seventh after the Russian Federation, Germany, Turkey, France, the United Kingdom and Italy. On 1 May 2008, the population was 46 263 079, of whom 31 615 155 (68%) lived in urban areas and 14 647 924 (32%) in rural areas.

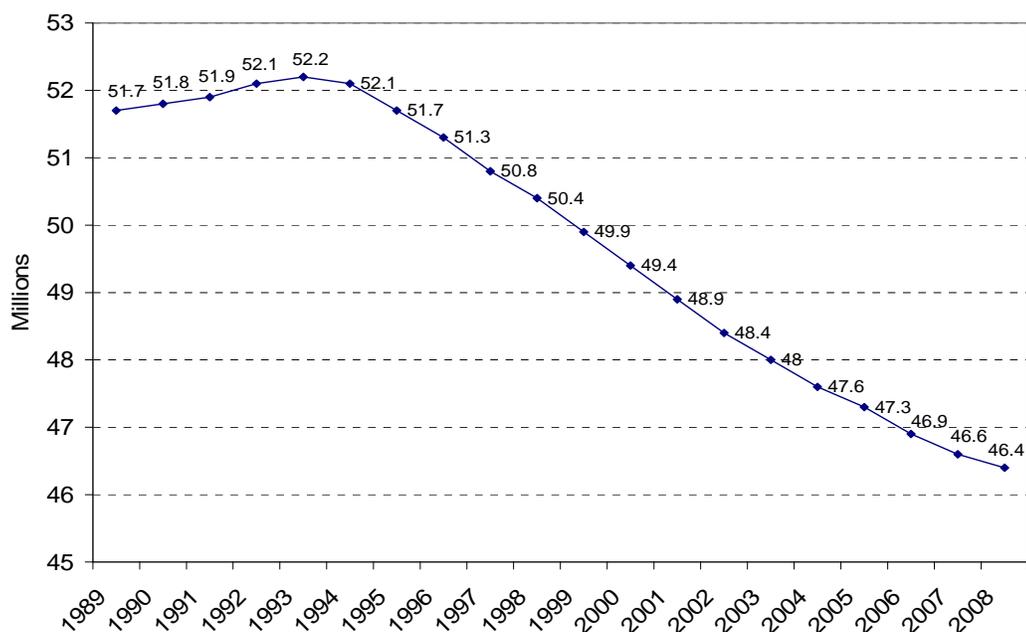
Since 1991, the growth in population has shown a negative trend. In 1993, the population was at its highest level ever: 52.2 million people but during the last 14 years it has steadily fallen, mainly due to a natural reduction as a result of the number of deaths exceeding the number of births – a common phenomenon in the recent history of many European countries. Ukraine is, however, distinguished by the scale and rate of depopulation, with the highest index of natural population reduction of all the European countries. During the last 10 years, the country has lost four million people as a result of depopulation.

Changes in the population in 1989–2006 are presented in Fig. 1.

*Age structure.* During the last 10 years, the population has been ageing (Table 1), leading to changes in reproduction indices. In the 1990s, this was caused by a deficit of young people (bottom-up ageing) as a result of declining fertility, which led to a fall in the percentage of children aged under 14 years from 19.7% in 1997 to 14.5% in 2006 (1). The main factor in population ageing is the increase in the number of old people (top-down ageing) resulting from lower mortality and longer life expectancy, which influences the proportion of people aged 60+ years. In Ukraine this is now 20.4% which, going by the Rosset scale, is considered a very high level of demographic ageing. Using United Nations norms, 16.2% of the population is now aged 65+ years, which the UN scale characterizes as a very old population (2).

*The gender structure* was reasonably stable from 1997 to 2006, with a ratio of women to men of 1.4. There are more boys among children aged 0–14 years (51.3%), which is explained by a higher proportion of boys among newborns: 105 (104–106) boys are born per 100 girls. The gender imbalance is observed until the age of 29 years, after which there are more women than men, especially in the group aged 65+ years (2–3-fold), which is typical for most countries in the world. On 1 January 2008, the proportion of females in the whole population constituted 53.7%.

Fig. 1. Population dynamics, Ukraine, 1989–2008



Source: State Statistics Committee (unpublished data).

Table 1. Age structure of population, Ukraine, 1990–2008

Year	Total population (000s)	0–14 years	15–24 years	25–44 years	45–64 years	65+ years
1990	51 556.5	11 084.2	6 935.2	14 513.2	12 849.3	6 174.6
1991	51 623.5	11 029.5	7 002.9	14 764.5	12 497.5	6 329.1
1992	51 708.2	10 951.4	7 055.0	14 879.3	12 314.3	6 508.2
1993	51 870.4	10 915.4	7 118.7	15 006.7	12 139.3	6 690.3
1994	51 715.4	10 767.7	7 146.1	14 973.0	11 965.3	6 863.3
1995	51 300.4	10 528.7	7 159.6	14 727.0	11 924.0	6 961.1
1996	50 874.1	10 246.0	7 164.4	14 578.3	11 826.4	7 059.0
1997	50 400.0	9 952.4	7 131.7	14 435.2	11 827.9	7 052.8
1998	49 973.5	9 624.5	7 117.9	14 325.9	11 878.6	7 026.6
1999	49 544.8	9 206.0	7 202.0	14 226.8	12 008.4	6 901.6
2000	49 115.0	8 781.0	7 275.9	14 092.2	12 147.0	6 818.9
2001	48 663.6	8 373.3	7 325.5	13 992.0	12 128.8	6 844.0
2002	48 240.9	7 949.9	7 381.2	13 851.5	12 079.7	6 978.6
2003	47 823.1	7 569.5	7 457.8	13 726.8	11 875.5	7 193.5
2004	47 442.1	7 246.3	7 478.6	13 590.9	11 757.0	7 369.3
2005	47 100.5	6 989.8	7 455.7	13 460.6	11 687.2	7 507.2
2006	46 749.2	6 764.7	7 366.7	13 342.8	11 707.8	7 567.2
2007	46 465.7	6 606.4	7 266.8	13 249.5	11 739.9	7 603.1
2008	46 192.3	6 501.1	7 103.1	13 206.6	11 874.8	7 506.7

*Nationalities and ethnic groups.* Over 130 nationalities live in Ukraine. According to the most recent population census data (2001), there were 37.5 million Ukrainians (78.0% of the total population), 8.3 million Russians (17.3%) and 2.3 million (4.7%) of other nationalities.

## Administrative structure

Ukraine consists of 24 regions (*oblasts*), two cities with the status of *oblasts* (Kiev and Sebastopol) and the Autonomous Republic of Crimea. On 1 January 2008, there were 458 cities (including 179 cities with special national or regional status), 886 towns and 28 504 rural settlements. There are 490 districts in rural areas and 118 districts in urban areas.

## Socioeconomic development

Between 2001 and 2006, economic development was fast (Table 2). The gross domestic product (GDP) in real prices increased more than 2.5-fold. Despite high inflation, the real income of the population increased annually.

Table 2. Basic indices of socioeconomic development, Ukraine, 2001–2006

Indices	2001	2002	2003	2004	2005	2006	2007
GDP in actual prices (billion Hrv)	204	226	267	345	441	538	663
Real GDP as percentage of previous year	109.2	105.2	109.6	112.1	102.7	107.1	107.3
Consumer price index as percentage of previous year	112.0	100.8	105.2	109.0	113.5	109.1	112.8
Consumer price index (current December compared to previous December)	106.1	99.4	108.2	112.3	110.3	111.6	116.6
Real available incomes as percentage of previous year	110.0	118.0	109.1	119.6	123.9	113.4	112.5
Average monthly nominal wages of permanent workers (Hrv)	311	376	462	590	806	1 041	1 351
Index of the real wage as percentage of previous year	119.3	118.2	115.2	123.8	120.3	118.3	112.5
Exchange rate of Hrv to US\$ 1 (average for the year)	5.372	5.327	5.333	5.319	5.125	5.050	5.05
Available population (average for the year) (million)	48.7	48.2	47.8	47.5	47.1	46.8	46.5
GDP per capita (Hrv)	4 195	4 685	5 591	7 273	9 372	11 490	14 258
GDP per capita (US\$)	780	879	1 049	1 366	1 829	2 275	2 823

Source: Ministry of Finance and State Statistics Committee (unpublished data).

## Financing of health care

Total government expenditure on health care increases annually. According to the Ministry of Finance, in 2000–2006 health care expenditure increased from Hrv 4.9 billion to Hrv 19.7 billion (Table 3). Health care expenditure accounted for 10.2%–12.8% of the total budget, and rose from 2.9% of GDP in 2000 to 3.7% in 2006 (3).

The National Health Accounts give a better description of the financing of health care (4), tracing the funds from source to financing agents and on to health care functions and health care providers. Donor organizations support the use of their methodology to review the health care financing system and to estimate levels of public and private expenditure for general health care functions.

Table 3. National health care expenditure, Ukraine, 2000–2006 (Hrv million)

	2000	2001	2002	2003	2004	2005	2006
Total expenditure	48 149	55 528	60 319	75 792	102 538	141 990	175 512
Health care expenditure	4 888	6 239	7 538	9 708	12 159	15 476	19 737
Percentage of total expenditure	10.15%	11.24%	12.50%	12.81%	11.86%	10.90%	11.25%
GDP	170 070	204 190	225 810	267 344	345 113	441 452	537 667
Percentage of GDP	2.87%	3.06%	3.34%	3.63%	3.52%	3.51%	3.67%

Source: Ministry of Finance (unpublished data).

Findings from a general analysis of the National Health Accounts indicate that in 2003–2004, about 7% of GDP was devoted to health care (including allocations in the budget and contributions from private sources and donors): almost twice that in countries at a similar stage of economic development. This is almost twice as high as official sources have previously reported.

Thus general government expenditure on health care as a percentage of GDP accounts for approximately 4%, of which around 58% is derived from public sources (national and local).

Total public health care expenditure accounts for 13–14% of general government spending. Contributions from donors in the health sector are marginal and range around 1%. Private sources shoulder the remaining burden, out of which households contribute almost 38–39% of national health expenditure. Most private expenditure is out-of-pocket (about 38%), which creates financial access barriers for the people, of whom the poor suffer most.

Preventive and public health activities receive only about 4% of national health expenditure, which is quite low. Drugs account for 33% of national health expenditure, a fairly high figure. The major burden for financing medicines falls on households, who contribute about 96% of all expenditure on medicine. Around a quarter of national health expenditure goes on inpatient care and about 15% on outpatient services (including primary health care and specialty outpatient consultations). A significant amount (around 7%) is spent on rehabilitation, mainly on sanatoria.

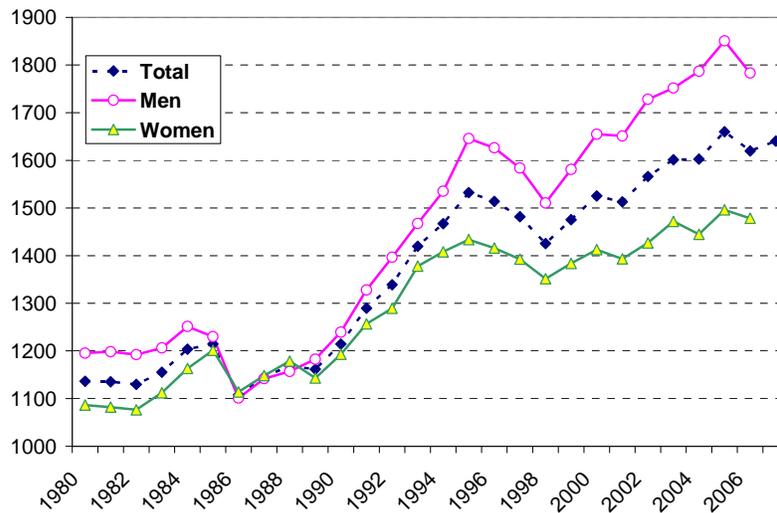
Significant spending on labour and utility costs is determined by the nature of health care financing, which employs input-based budgeting and financing as opposed to output-based payments to providers. Thus, the increasing health care allocations (in absolute terms) from public sources are mainly driven by rising salary rates in the public sector and increasing utility costs resulting from gradual liberalization of the economy, and are not tailored to the actual health care needs of the population.

Such financing lacks adequate economic motivation to promote efficiency in the system and, as a result, Ukraine has one of the highest ratios of hospital beds to population and longest average lengths of hospital stay in the Region.

## Health of the population

Since 1989, mortality has increased overall although at some points (1996–1998, 2001, 2006) it has decreased (Fig. 2).

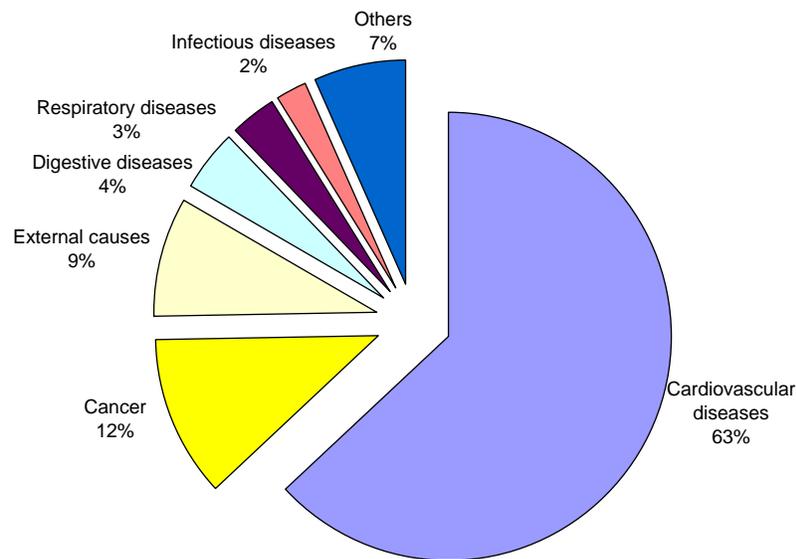
Fig. 2. All-causes mortality in Ukraine (per 100 000 population), 1980–2007



Source: State Statistics Committee (unpublished data).

Cardiovascular diseases, cancer and external causes of death are predominant in the mortality structure (Fig. 3).

Fig. 3. Mortality structure in Ukraine, 2007



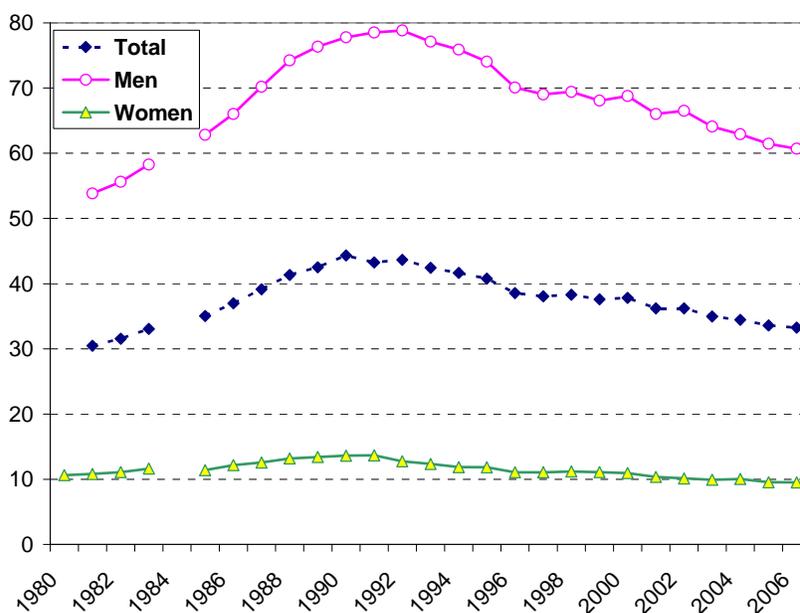
Source: State Statistics Committee (unpublished data).

In 1990–2007, there was an increase in cardiovascular mortality and external causes of death, especially from fire, and a decrease in cancer and respiratory mortality (Table 4). Mortality from cancer of the trachea, bronchus and lung has fallen since 1992 for both men and women (Fig. 4).

Table 4. Mortality in Ukraine, 1990–2007

Year	Total number of deaths (000s)	Cardiovascular diseases	Neoplasm	<i>including malignant neoplasm of trachea, bronchus and lung</i>	Accidents, poisoning and traumas	<i>including fire accidents</i>	Respiratory diseases
1990	629.6	332.9	102.3	23.0	55.6	1.1	37.3
1991	669.9	349.3	105.1	22.5	61.0	1.1	38.7
1992	697.1	360.0	105.8	22.7	67.0	1.3	38.5
1993	741.7	408.3	104.6	22.2	68.5	1.4	42.4
1994	764.6	432.3	104.7	21.7	74.9	1.5	44.5
1995	792.6	450.4	102.5	21.1	82.7	1.6	46.1
1996	776.7	446.8	99.2	19.8	80.4	1.8	44.0
1997	754.2	446.4	97.9	19.4	74.7	1.7	41.4
1998	719.9	434.0	97.8	19.3	69.9	1.5	36.3
1999	739.2	448.9	98.5	18.8	71.2	1.7	37.1
2000	758.1	463.9	97.8	18.8	73.6	1.8	37.9
2001	745.9	457.4	95.6	17.9	75.3	2.0	33.5
2002	754.9	465.3	95.1	17.5	76.3	2.4	31.8
2003	765.4	478.7	93.2	16.7	72.6	2.4	30.3
2004	761.3	473.7	92.1	16.3	71.3	2.4	28.5
2005	782.0	489.0	91.9	15.8	69.3	2.8	28.0
2006	758.1	480.8	90.4	15.5	64.6	2.5	24.7
2007	762.9	480.6	90.0		66.0	2.7	25.1

Fig. 4. Lung cancer mortality per 100 000 population, Ukraine, 1980–2006



Source: State Statistics Committee (unpublished data).

From 1990 to 2006, total morbidity was reasonably stable (Table 5). Morbidity from cardiovascular diseases and total neoplasms was on the rise, while mortality from neoplasms of the trachea, bronchus, lung, lip, esophagus and mouth neoplasm decreased.

Table 5. Morbidity in Ukraine, 1990–2006

Year	Total	Number (000s) of first registered cases of:							
		neo-plasm	diseases of the nervous system <sup>a</sup>	diseases of the blood systems	diseases of the respiratory system	diseases of the skin and subcutaneous tissue	diseases of the musculo-skeletal system and connective tissue	diseases of the genito-urinary system	external causes of injury and poisoning
1990	32 188	310	2640	1149	17021	1799	1374	1224	2866
1991	–	–	–	–	–	–	–	–	–
1992	33 214	333	3005	1412	16226	1999	1529	1459	3018
1993	33 833	332	3045	1412	16671	2037	1543	1519	2878
1994	31 455	328	3024	1401	14499	2135	1439	1489	2704
1995	32 547	327	3037	1390	15705	2144	1416	1544	2647
1996	30 169	335	3067	1412	13221	2090	1431	1623	2603
1997	31 158	348	3104	1497	14129	2051	1476	1711	2484
1998	31 974	372	3331	1690	13877	2122	1600	1881	2465
1999	32 959	382	767	1950	14485	2037	1548	1886	2401
2000	33 471	382	748	2338	14639	1996	1571	1939	2339
2001	33 192	394	745	2384	14213	2008	1593	2049	2339
2002	32 233	382	748	2370	13372	1950	1598	2039	2244
2003	32 585	395	751	2386	13835	1915	1572	2077	2297
2004	32 573	406	755	2498	13511	1917	1609	2153	2245
2005	32 912	408	754	2430	13894	1936	1600	2185	2264
2006	32 240	414	764	2431	13308	1906	1597	2172	2289

<sup>a</sup> Since 1999, diseases of the eyes and ears have been in separate ICD-10 categories from diseases of the nervous system and sensory organs.

Source: State Statistics Committee (unpublished data).

## 2. Tobacco consumption and tobacco-related harm

### Active smoking and related problems

#### *Smoking prevalence among the adult population*

The first available reference to smoking prevalence in Ukraine was in a study conducted by Shuteeva & Garnitskii in 1990 (5). This study was carried out among 1500 men aged 20–69 years living in Kiev, with the aim of studying the prevalence of risk factors for coronary heart disease. Of these men, 51.1% were found to be tobacco-smokers. Every tenth man smoked over 20 cigarettes, every fourth man smoked 10–20 cigarettes a day. The proportion of tobacco-smokers decreased with age, from 61% in the group aged 20–29 years to 33% in the group aged 60–69 years.

Starting from 2000, several small and larger surveys were conducted in Ukraine supported by various foreign and international donors. Data from these surveys are summarized in Table 6 (6).

The obvious inconsistency of the information with regard to smoking prevalence is partly accounted for by different methods of data collection, ages, sampling, etc. Even so, there is still an obvious upward trend in the non-standardized smoking prevalence rates.

The only study so far which has compared age-standardized smoking prevalence rates in repeated cross-sectional surveys conducted in all regions of the country found a considerable

Table 6. Smoking prevalence in adults, Ukraine, 2000–2007

Time of survey	Sample size	Age (years)	Agency	Smokers (%)			Non-smokers (%)			Quitters (%)			Source
				All	Male	Female	All	Male	Female	All	Male	Female	
2000, February	1590	18+		31	57	10	56	22	83	13	21	7	(10)
2001	2392	18+		27	53	11	65	31	86	8	17	3	(11)
2000, November	1797	15+	Institute of Sociology	40	64	19	51	22	76	9	14	5	(12)
2001, June	2721	14+	Institute of Social Research	34	57	14							(12)
2002	1711	18+	Kiev International Institute of Sociology	34	61	12	53	20	81	13	19	7	(13)
2002, November	2463	15+	Institute of Social Research	37	59	16	57	30	81	7	11	3	
2004, August	2008	18+	Institute of Social and Political Psychology	31	50	16							(14)
2005, June	2239	15+	Kiev International Institute of Sociology	41	67	20	50	18	76	9	15	4	(15)
2007	1000	15 +	Gallup	32									(16)

increase in smoking prevalence between 2001 and 2005 (7). On average, an additional 1.5–2% of adult women (aged 15+ years) and 3–4% of adult men were taking up smoking each year. In fact, the proportion of new smokers could be even larger, as other smokers stopped. This process developed in a different way among men and women. Men were more likely to be smokers if they were aged 30–60 years, had only a secondary education and suffered a medium level of deprivation. Yet the risk of becoming a smoker for men was higher among the lower educated and again among people with a medium level of material deprivation. These observations show that different trends co-exist in the development of the tobacco epidemic in men: the most educated and affluent are no longer in the vanguard of smoking uptake, but smoking is by no means confined to the poorest.

In 2005, smoking prevalence among males (67%, including occasional smokers) was the highest in the Region, and among females (20%, including occasional smokers) it was the highest in the Commonwealth of Independent States (6,8,9).

Since 2000, the State Statistics Committee has been conducting annual household surveys, which include questions on smoking, and publishing data on smoking prevalence among the population aged over 12 years (Table 7).

Data re-calculated for some years separately for men and women aged 18+ years are presented in Table 8.

Table 7. Smoking prevalence in the population aged over 12 years, Ukraine, 2000–2007

Year	Prevalence (%)
2000	23.6
2001	23.5
2002	22.9
2003	24.2
2004	25.3
2005	25.3
2006	25.4
2007	24.9

Source: State Statistics Committee (unpublished data).

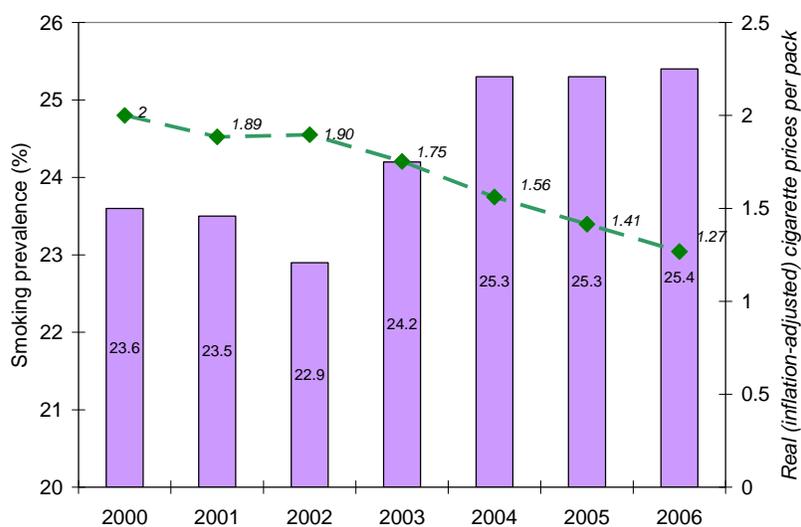
Table 8. Smoking prevalence in the population aged 18+ years, Ukraine, 2000–2006

Year	Total No. of smokers (%)	Men	Women
2000	26.0	54.0	4.9
2001	26.3	54.5	4.6
2005	27.4	53.1	6.3
2006	27.5	53.9	6.4

Source: State Statistics Committee (unpublished data).

The upward trend in smoking prevalence has been linked to the simultaneous fall in the real prices of cigarettes (see Fig. 5) and was probably caused by it.

Fig. 5. Real cigarette prices (Hrv per pack) and smoking prevalence, Ukraine, 2000–2006



Source: State Statistics Committee (unpublished data).

*Women and smoking.* The characteristics of the tobacco epidemic among Ukrainian women suggest that it may be related to the processes of emancipation and social improvement (7). Women are more likely to smoke if they are young, live in large cities and have a university education. The epidemic is, however, now spreading more widely: women in older age groups and those living in smaller settlements are showing increasing trends towards becoming smokers, although a university education remains associated with the highest risk of smoking uptake.

The epidemiological study conducted by the Institute of Cardiology revealed that within the last 25 years, the smoking rate among women increased 3-fold in urban areas and 17-fold in rural areas.

*Level of education and smoking.* The gradients of smoking prevalence between the lower and higher educated and between poorer and richer people appear to be remaining stable in men and increasing in women, in contrast to the opposite trend seen in countries where comprehensive tobacco control measures have been implemented and declines in smoking prevalence observed. In such countries, while the overall prevalence went down, the differentials in smoking prevalence between men and women and the younger and older age groups decreased as well.

### Regional differences

The smoking prevalence among the population of Kiev city was studied through postal surveys conducted in 2002, 2004 and 2006, according to the CINDI Health Monitor Survey, 2001 international protocol. This study has shown a declining rate of smoking in men aged 20–64 years and a rising daily rate of smoking in women of childbearing age.

Some information on regional smoking prevalence is available from the annual household surveys conducted by the State Statistics Committee (Table 9). The Donetsk and Pridniprovskiy regions had the highest smoking rates (28–29%) and highest prevalence increases (1.13) in 2004–2006 compared to 2000–2002, while the Carpathian and Poliskiy regions had the lowest smoking rates (20–23%) and lowest prevalence increases (1.04–1.05) in the same two periods.

Table 9. Regional smoking prevalence among the population aged 12+ years (%), Ukraine, 2000–2006

Regions	2000	2001	2002	2003	2004	2005	2006	Average 2000– 2002	Average 2004– 2006	Relative risk <sup>a</sup>
East	23.6	24.8	23.1	25.0	25.5	24.9	26	23.83	25.47	1.07
Donetsk	26.6	26.0	24.3	27.0	30.0	28.7	28.2	25.63	28.97	1.13
Pridniprovskiy	25.3	25.7	24.5	27.6	26.8	29.6	28.6	25.17	28.33	1.13
Prichornomorskiy	23.7	23.8	23.9	24.9	25.9	25.4	26.3	23.80	25.87	1.09
Podilskiy	20.4	21.1	20.4	20.7	22.6	23.3	22.4	20.63	22.77	1.10
Centre	23.8	21.6	22.6	23.7	25.6	22.5	24.5	22.67	24.20	1.07
Carpathian	22.1	22.0	20.9	21.3	22.2	23.1	22.8	21.67	22.70	1.05
Poliskiy	20.6	20.5	21.6	20.6	21.0	22.5	21.8	20.90	21.77	1.04

<sup>a</sup> Relative risk of smoking in 2004–2006 compared to 2000–2002.  
Source: State Statistics Committee (unpublished data).

In the 2005 survey (15), smoking prevalence was compared in six regions: Centre (Cherkassy, Dnepropetrovsk, Kirovograd, Poltava, Sumy *oblasts*), East (Donetsk, Kharkiv, Lugansk *oblasts*), Kiev city, North (Chernigiv, Khmelnytsky, Kiev, Vinnitsa, Zhitomir *oblasts*), South (Crimea,

Kherson, Mykolaiv, Odessa, Zaporizhya *oblasts*), West (Chernivtsi, Ivano-Frankivsk, Lviv, Rivne, Ternopil, Volyn, Zakarpatsky *oblasts*).

The results showed that the highest smoking prevalence among men is found in the East (75%) and North (68%). Smoking prevalence among women in the West and North (12–14%) is almost half that found in the East and South and Kiev city (23–26%) (Table 10).

Table 10. Prevalence of smoking by gender and region, Ukraine (%)

	Total	East	West	North	South	Centre	Kiev city
<i>Males</i>							
Current smokers	67	75	63	68	63	66	61
Former smokers	15	14	19	13	16	11	13
Non-smokers	19	11	18	18	21	23	27
<i>Females</i>							
Current smokers	20	23	14	12	26	19	26
Former smokers	4	2	5	3	7	3	7
Non-smokers	76	75	81	84	68	77	67

## Conclusions

The available data on smoking among the adult population show a general upward trend in smoking prevalence, especially among women. Various data show that smoking in men may either still be on the rise or have stabilized in at least some sociodemographic groups, but this stabilization was at an extremely high level compared to other countries.

## Recommendations

To improve the monitoring of adult smoking, the government is strongly advised to conduct comprehensive annual national representative surveys in addition to the household surveys.

## *Smoking prevalence among young people*

Ukraine has participated in three international surveys conducted among young people: the European School Survey Project on Alcohol and other Drugs (ESPAD), the Health Behaviour in School-aged Children (HBSC) survey and the Global Youth Tobacco Survey (GYTS).

## ESPAD

The ESPAD was conducted in Ukraine in 1995, 1999, 2003 and 2007 (17). In 2003, both lifetime and 30 days prevalence of cigarette-smoking in Ukraine were slightly higher than the average of countries participating in the survey (70% versus 66% for lifetime smoking, and 39% versus 35% for the last 30 days prevalence) (Tables 11, 12).

Table 11. Lifetime smoking prevalence among the group aged 15–16 years, Ukraine, 1995–2007 (%)

	1995	1999	2003	2007
Boys		80	81	72
Girls		59	60	53
All	66	69	70	63

Table 12. Prevalence of smoking in the previous 30 days among the group aged 15–16 years, Ukraine, 1995–2007 (%)

	1995	1999	2003	2007
Boys	51	50	49	37
Girls	28	29	28	22
All	38	40	39	30

The Ukrainian Institute for Social Research, which conducted the surveys, concluded that the ESPAD data showed that lifetime smoking prevalence among teenagers increased significantly between 1995 and 1999 and decreased in 2007, and that the prevalence of smoking in the previous 30 days also decreased in 2007.

Generally the ESPAD data show that lifetime smoking prevalence among boys and girls aged 15–16 years was quite stable in 1995–2003 and decreased in 2007. This may be the first sign of the effect of those tobacco control measures which have recently begun to be implemented.

### HBSC

The HBSC surveys are conducted in children aged 11, 13 and 15 years across many countries. Ukraine took part in the 2001/2002 and 2005/2006 surveys. The international report of the 2001/2002 survey, *Young people's health in context (18)*, emphasized that Ukraine:

- has one of the highest proportions of school-aged children rating their own health as poorer (together with Latvia, Lithuania and the Russian Federation);
- has one of the lowest levels of satisfaction with their lives expressed by school-aged children (together with Latvia and Lithuania);
- has high rates of lifetime smoking (together with Estonia, Greenland, Latvia, Lithuania);
- has one of the greatest gender differences regarding school-aged children who have ever smoked, smoke weekly and smoke daily, meaning that smoking prevalence among boys is far higher than among girls;
- has one of the highest prevalences of current smoking among boys (41.7% among 11-year-olds, 73.8% among 13-year-olds and 88.1% among 15-year-olds);
- has a much larger difference than is seen in other European countries in the age when school-aged children begin to smoke: girls start two years later than boys;
- has easier access to tobacco, greater exposure to advertising and relatively weak control efforts for school-aged children, which may reduce the potential for change even when programmes are implemented in schools.

The report on the 2006 national HBSC (19) shows that in 2002–2006, both lifetime and current smoking prevalence among 11–12-years-olds hardly changed, while in those aged 13–16 years it fell, especially among boys, although it was still rather high. Among current smokers aged 15–16 years, 42% were boys and 26% were girls (Table 13).

The largest percentage of daily smokers was among first-year students at professional schools (boys 46% and girls 25%). Among male students at other colleges, 26% smoked daily, as did 18% of 10th grade students at high schools. Among those who had ever smoked, the percentage

Table 13. Smoking habits among teenagers participating in the HBSC surveys by age, gender and year of survey, Ukraine (%)

Age group	Year	Gender	Ever smoked	Current smokers
6th grade (11–12 years)	2002	boys	39	8
		girls	18	1.7
	2006	boys	38	8
		girls	20	2
8th grade (13–14 years)	2002	boys	72	23
		girls	42	10
	2006	boys	63	19
		girls	41	9
10th grade, freshmen of professional schools and colleges (on the base of 9 grades) (15–16 years)	2002	boys	87	52
		girls	72	32
	2006	boys	80	42
		girls	64	26

Source: Ukrainian Institute of Social Research (19).

of daily smokers varied between different classes and educational institutions: 72% among students at professional schools, 55% among students in other colleges, 50% among 10th grade high-school students, 40% among 8th grade schoolchildren and 15% among 6th grade schoolchildren.

### GYTS

This section is based on data from the GYTS conducted in Ukraine in 1999 and 2004.

As the samples of teenagers surveyed in 1999 and 2004 differed in age, it is inappropriate to compare them directly. The younger age of the respondents in 2004 meant that they were less likely to report that they had ever smoked or were current smokers, and more likely to say that shopkeepers had refused to sell them cigarettes.

However, one characteristic unrelated to age was also different. In 2004, larger percentages of both boys and girls reported that their fathers smoked than did so in 1999, which reflects the overall trend in adult smoking prevalence (7).

The percentage of children who had started smoking before they were 10 years old increased in girls (from 7.6% to 9.7%) and decreased in boys (from 28.5% to 25.6%). This growing risk of early smoking initiation accords with other recent results (20) showing that in Ukraine younger girls and women are now at greater risk of smoking their first cigarette at a younger age than those born earlier: the mean age of smoking initiation in women falls by three years for every five years' time span. It was also found that both men and women are now at greater risk of daily smoking than those from several years ago.

Because of the age-related discrepancies in the samples described above, the comparison of smoking-related behaviour was adjusted for those hardly modifiable variables which characterize sociodemographic status and smoking environment.

To do so, the following outcome measures were used:

- *early initiation of smoking*: those who started smoking before the age of 10 years versus those who did not;

- *current smoking*: those who reported smoking on at least one day within the previous 30 days (one month) versus those who did not smoke during the same period;
- *stopping smoking during the previous year*: those who said they had stopped smoking during the previous year versus those who said they had smoked during the previous year but not stopped;
- *tobacco dependence*: those with strong dependence on tobacco versus other smokers.

The adjusted comparison showed that the risk of beginning to smoke early increased slightly between 1999 and 2004, with the gender differences discussed above, and is negatively associated with age, i.e. the younger birth cohorts start to smoke earlier than those in older age groups. The risk of starting to smoke early is higher in boys than in girls, with the trend towards equalizing. Beginning to smoke early is associated with a perceived high prevalence of smokers in school and smoking by the father.

The risk of current smoking has slightly but significantly increased (odds ratio (OR)=1.28; 95% confidence interval (CI) = 1.10–1.47) between 1999 and 2004. It is higher in boys and increases with age. Being a current smoker is more strongly associated with smoking by the mother than by the father, although both associations are significant. If teenagers perceived that only half or fewer of their peers smoked, they were less likely to keep smoking.

The risk of developing strong nicotine dependence was higher in 2004 than in 1999 (OR = 1.72; 95% CI = 1.09–2.72), and once again was higher in boys and increased with age. If only a minority of their classmates smoked, teenagers were less likely to develop a strong dependence on nicotine.

The number who had stopped smoking during the previous year increased slightly between the two surveys (OR = 1.28; 95% CI = 1.05–1.55). It is more prevalent among younger respondents and girls, so that there are fewer nicotine-dependent teenagers, and in those classes where only some people smoke and in families where the parents do not smoke.

## **Conclusions**

There is an extremely high smoking prevalence in young males and an expressed gender difference with regard to the age of starting to smoke and the prevalence of smoking.

Between 1999 and 2004, the changes observed related to the earlier age at which teenagers started to smoke (especially girls), and the greater likelihood of them becoming current smokers and developing nicotine dependence. The trends towards stopping smoking also increased.

## **Recommendations**

The government is encouraged to make public all data obtained from the surveys so as to facilitate the appropriate monitoring of smoking among youngsters and teenagers.

## ***Smoking prevalence among health professionals***

The Global Health Professionals Survey (GHPS) conducted in other countries under the leadership of CDC has unfortunately not yet been carried out in Ukraine. However, some other surveys have been carried out and the results are summarized in Table 14.

Table 14. Smoking prevalence in physicians according to different surveys, Ukraine

Year	Age group (years)	Males (%)	Females (%)	All (%)	Area	Source
1998		43	19			(21)
2003		38–45	8.5–15			(22)
2003	21–77	52	17	29.6	Kiev city, Lugansk and Zhytomyr <i>oblasts</i>	(23)
2003 or 2004	20–25	40	23	28.6	Kiev city	(25)
2007		43	9	20	Kiev city	(27)

In 1998, according to the Institute of Cardiology, smoking prevalence among medical doctors was 43% for males and 19% for females (21). In 2003, researchers at the same Institute reported that 38–45% of male physicians and 8.5–15% of female physicians smoked (22).

In 2003, smoking among health professionals was estimated in a sample of 799 general practitioners, consisting of 287 men and 512 women aged 21–77 years in Kiev city and Lugansk and Zhytomyr *oblasts*. The authors reported the prevalence of never smoking in this survey: 64.5% among all physicians, 37.6% among male physicians, and 79.5% among female physicians, probably relying less on reports regarding current and past smoking (23).

Based on the estimates from 2005 national representative survey of the adult population (15) with the use of WHO recommended questions (24) both among women and men the ratio of past to current smokers is 1:5. Applying this to the 2003 results described in the previous paragraph (23), 52% of male, 17% of female and 29.6% of all physicians can be expected to be current smokers.

Chaban & Turanskyj (25,26) surveyed 140 medical students in the fourth to sixth years of study, aged 22.5±2.3 (95 females and 45 males). The prevalence of smoking was 40% among male students and 23.2% among female students, 28.6% on average.

Stoyka (27) surveyed 620 physicians in Kiev and found that 20.0% of them were smokers (43.1% of men, 9.0% of women). Smoking prevalence was higher among secondary level health professionals (44.0% of men and 11.9% of women) than among general practitioners (38.1% of men and 10.0% of women), and especially high among cancer surgeons.

Stoyka concluded that smoking prevalence among female health professionals in Kiev was significantly lower than in the female patients, but he did not find significant differences for male patients and health professionals. His results are, however, lower than in other surveys of health professionals, and it is not known whether age-standardized rates were compared.

## Conclusions

The available studies do not allow any clear trend in smoking prevalence to be observed among health professionals. As in the general population, smoking is less prevalent in males and more prevalent in females among the younger respondents living in larger cities (students in Kiev in this case) compared to those living in smaller settlements and in older age groups. Again, as in the general population, an upward trend in smoking prevalence among male health professionals was observed between 1998 and 2003. Unfortunately the characteristics of the 1998 sample are not known. If the sample was city-based, the higher prevalence in females and lower in males may be accounted for by that.

Otherwise, the estimated prevalence of smoking among health professionals is slightly lower than that in the general population with a university education, but the data do not allow the significance of the difference to be estimated.

### **Recommendations**

Smoking by health professionals is not under control and no incentives are provided for them to stop. Judging by the experience of developed countries, a decrease in smoking prevalence among health professionals usually precedes similar trends in the general population. Smoking control measures in medical schools and health care institutions could encourage health professionals to stop smoking and, furthermore, to advise patients on the same subject.

### **Exposure to second-hand tobacco smoke**

An analysis based on the national survey of tobacco use conducted in 2005 (15) has shown that a majority of the population (53%) perceive themselves to be exposed to environmental tobacco smoke (ETS) at least daily. When such exposure for several days a week is considered together with daily exposure, 74% of former smokers and 65% of non-smokers say they are exposed. The prevalence of exposure to ETS declines with age, and this decline is the greatest for former smokers. Exposure to ETS is more commonly reported in larger cities than in towns and villages, and by people with higher incomes compared to those with lower incomes.

Six in ten (61%) households either have no smokers or require people to smoke outside. In 20% of households, smoking is on the stairs, balcony, etc. In 19% of households, smoking takes place inside the house. Household smoking restrictions are predominantly decided by the smoking status of the respondents: when smoking is controlled, males report stricter household smoking restrictions than females.

About one third of workplaces have no smoking restrictions and another third have designated rooms for smoking. One in five (20%) respondents report that the designated rooms for smoking are also used by non-smokers, and 17% report that smoking is totally banned. Workplaces with strict smoking restrictions are more frequently reported by women and by non-smokers.

The majority of respondents (58%) agreed that people have a right to work in a smoke-free environment. This idea is more prevalent among women than men. The higher the education, the greater the percentage of those who believe that everyone has the right to work in a smoke-free environment.

Only 30% of the 2005 survey participants responded that they always asked smokers not to smoke in their presence or near their children and other family members. Males and current smokers were less likely to make this request, and older people were more likely to make it than younger people.

In a study (28) aimed at estimating the exposure of the population to ETS and to explore its determinants, it was found that such exposure is associated with smoking regulations at workplaces and homes, and the presence of colleagues who smoke.

Nevertheless, measures of individual behaviour do not show a significant decrease in exposure to ETS: awareness of ETS-related harm, efforts to protect oneself against tobacco smoke, number of smokers in the family, even the respondent's own smoking status were not associated with level of exposure to ETS.

An analysis of surveys conducted in 2000 (12) and 2005 shows that support for smoke-free policies is higher among non-smokers, females, respondents aged 30–44 years and 60–74 years, more educated people and those living in smaller settlements.

Generally, support for legislative regulation of smoking in public places increased from 87% to 96% (OR = 4.40; 95% CI = 3.19–6.07).

Attitudes towards exposure to ETS can be best predicted according to the smoking status. While 68% of current smokers believe that tobacco smoke is definitely harmful, this proportion reaches 78% in former smokers and 84% in non-smokers. Women were more aware of ETS-related hazards than men, and this increased significantly between 2000 and 2005 (OR = 3.03; 95% CI = 2.33–3.95). The percentage of total respondents who agree that tobacco smoke is definitely harmful increased from 50.4% to 76.9%.

### **Conclusions**

People cannot protect themselves from exposure to tobacco smoke. Only centrally adopted smoke-free policies in work- and public places can measurably decrease this exposure. Such policies have strong public support.

### **Recommendations**

To reduce passive smoking rates in the population, public awareness campaigns on specific hazards of exposure to ETS are recommended. Comprehensive and well-enforced smoking bans in work- and public places do, however, have greater potential for protecting people.

## **Stopping smoking and level of nicotine dependence**

### **Former smokers**

As the nationally representative survey from 2005 (15) revealed, former smokers (those who used to smoke daily, but currently do not smoke at all) constitute only 9% of the adult population (14% of men and 4% of women), which is one fifth of the proportion of current smokers (40%). Thus only every sixth smoker has managed to stop smoking, a proportion which is similar for both male and female smokers. In 2000, former smokers also constituted 9% of the adult population (12). According to some surveys (see Table 6), the proportion of former smokers is as high as 13%, although the questions in those surveys were formulated in such a way that even those who had smoked just a few cigarettes during their lifetimes could be considered as former smokers.

Thus between 2000 and 2005 there were no processes that could have an effect one way or another on the rates of people stopping smoking.

### Smokers wishing and attempting to stop smoking

As in many countries in the world, a majority of smokers want to stop smoking. In 2000, 65% of smoking respondents reported that they wished to stop smoking and 60% said that they had already tried to stop, without success.

In 2005, 66% of male smokers and 60% of female smokers reported that they had attempted to stop smoking, while 69% and 65%, respectively, said that they wanted to stop.

As some increase in the desire to stop smoking was recorded between 2000 and 2005, as well as of the rates and numbers of those who had tried to stop, a study was made to see whether these changes were significant taking into account other factors related to rates of stopping, such as age, education and place of living (Table 15.).

Table 15. Logistic regression analysis of wish to stop, and attempts to do so, among men in Ukraine in 2000 and 2005, controlled for age, education and type of settlement (OR and 95% CI)

	No.	Desire to stop smoking			Earlier attempts to stop smoking		
		OR adj <sup>a</sup>	95% CI for OR		OR adj <sup>a</sup>	95% CI for OR	
			Lower bound	Upper bound		Lower bound	Upper bound
<i>Year</i>							
2000	633	1.000			1.000		
2005	626	1.264	0.954	1.676	<b>1.376<sup>b</sup></b>	<b>1.053</b>	<b>1.799</b>
<i>Type of settlement</i>							
City (> 1 million)	171	1.000			1.000		
City	339	1.478	0.976	2.237	<b>1.585</b>	<b>1.075</b>	<b>2.337</b>
Town	382	<b>2.100</b>	<b>1.374</b>	<b>3.211</b>	<b>2.384</b>	<b>1.595</b>	<b>3.564</b>
Village	367	<b>1.932</b>	<b>1.271</b>	<b>2.936</b>	<b>1.894</b>	<b>1.279</b>	<b>2.804</b>
<i>Education</i>							
Primary	213	1.000			1.000		
Secondary	729	1.164	0.825	1.642	1.135	0.809	1.593
College	165	<b>1.887</b>	<b>1.126</b>	<b>3.162</b>	<b>1.668</b>	<b>1.033</b>	<b>2.693</b>
University	152	<b>2.067</b>	<b>1.257</b>	<b>3.398</b>	<b>1.697</b>	<b>1.058</b>	<b>2.720</b>

<sup>a</sup> OR adj – odds ratios adjusted for age, education and place of living.

<sup>b</sup> Results significant at 0.05 level are shown in bold.

The answers of smokers in two cross-sectional surveys in 2000 and 2005 were compared for the following questions: 1) Do you wish to stop smoking? 2) Have you already tried to stop smoking?

While the crude percentage differences between the surveys in 2000 and 2005 were significant, after controlling for education they turned to be insignificant. In 2005, however, the proportion of men who had tried to stop smoking was considerably higher than in 2000, and was more noticeable among men with a higher level of education and among those living in small settlements.

While there was no significant increase in the percentages of women who wished to stop smoking and of those who had tried to stop, women who lived in small towns and villages were more likely both to want to stop smoking and to have attempted to do so.

### **Level of nicotine dependence**

In the national representative survey conducted in 2005 (15), nicotine dependence was measured by taking into account the time of the first cigarette of the day and the level of consumption. Nearly one in three (30%) smokers reported smoking their first cigarette just after waking up; 18% within the next half hour; 20% within the next hour; and 18% later but still before midday.

The percentage of men smoking early in the morning is higher than the corresponding percentage of women (75% versus 57%). The time of the first cigarette and the level of consumption are related to each other. Smoking during the first hour after waking up is associated with smoking more than 10 cigarettes daily, while smoking the first cigarette at a later time was associated with a lower level of smoking (29).

To simplify further consideration of the issue, those smokers who smoke more than 10 cigarettes a day and start smoking within the first hour or earlier have been classified as highly dependent and those who smoke less and start smoking later have been classified as having a lower level of dependence.

The survey shows a clear association between the level of nicotine dependence and the age for male smokers. In the groups aged 30–74 years, more than 75% of male smokers are highly nicotine-dependent. Above 75 years of age, this level is lower. This could be because either males in this birth cohort started to smoke later and did not develop as high a level of dependence, or because heavy smokers have higher mortality rates and do not survive. The percentage of highly dependent smokers is lowest among the youngest group of smokers, both men and women. The proportion of highly dependent male smokers is extremely high in the east (82.8%), south (82.4%) and the Crimea (87.0%). Levels of education and income and type of settlement were not significantly associated with the level of nicotine dependence.

### **Conclusions**

Most smokers want to stop and have already tried to do so. The proportion of former smokers is, however, low at only 9% of the adult population. The ratio of current smokers to former smokers is the same for men and women at about 5:1. Among male smokers, the proportion of those who want to stop smoking is showing a rising trend, and the proportion of those who had attempted to stop smoking increased significantly between 2000 and 2005. No such trends are seen among women, which could be because of differences in the development of the smoking epidemic among men and women. The levels of nicotine dependence are also different in men and women.

### **Recommendations**

While most smokers want to stop smoking, only a few manage to do so by themselves. Services to help smokers to stop smoking, including brief advice from physicians, special clinics for stopping smoking and quit-lines should be developed with governmental funding.

### **Tobacco-related mortality and morbidity**

According to the WHO *European Health Report 2005* (30), tobacco is a major risk factor in Ukraine: in 2002 it caused 14.8% of total mortality and 12.8% of disability-adjusted life-years. Smoking causes 13% of the disease burden (31).

In 2000, 91 421 men (24% of total deaths in men) and 8208 women (2% of total deaths in women) died of tobacco-related causes (Table 16). The total number of tobacco-related deaths was about 100 000 or 13% of total mortality.

Table 16. Numbers of deaths attributed to smoking/total deaths (000s), Ukraine, 2000, by cause

Cause	Males			Females		
	0–34 years	35–69 years	70+ years	0–34 years	35–69 years	70+years
Lung cancer	–/0.1	11/11	4.1/4.6	–/0.0	0.5/1.5	0.5/1.4
All cancers	–/1.3	18 /37 (49%)	5.9 /17 (35%)	–/1.2	0.6/24 ( 3%)	0.6/17 (3%)
Vascular	–/2.2	31 /92	11/102	–/0.7	1.8 /53	2.5/214
Respiratory	–/1.1	9.7 /14	6.9 /11	–/0.5	0.5/3.2	1.6 /8.1
All other	–/23	8.2/67	0.8 /14	–/7.3	0.3 /20	0.2 /27
All causes	–/28	67/211 (32%)	24/144 (17%)	–/9.7	3.3/100 (3%)	4.9/266 (2%)

Source: Peto R et al (32).

The main causes of tobacco-related deaths were:

- vascular diseases (46 038 – 47%)
- respiratory diseases (18 700 – 19%)
- lung cancer (16 100 – 16%)
- other cancers (9100 – 9%)
- all others (9400 – 9%).

While the percentage of deaths attributed to tobacco was highest for lung cancer (92% for men and 33% for women), the main burden (47%) of tobacco-related deaths came from cardiovascular diseases.

Most tobacco-related deaths (70 300) occurred in the group aged 35–69 years and the mean number of years of life lost per death from smoking at that age equalled 19 years. At 70+ years of age, the number of deaths was 28 000 and the mean number of years lost per death from smoking at that age was 8 years. The mean number of years lost per death from smoking in all age groups was 16 years.

According to Peto et al (32), in 1995 deaths from tobacco-related causes totalled 105 258 men (27% of total deaths) and 12 928 women (3% of total deaths), showing an apparent decrease in tobacco-related mortality, especially among women. However, this conclusion can be questioned on methodological grounds, as Peto et al based their method of estimating tobacco-related deaths on lung cancer mortality.

Since 1992, a decrease in lung cancer mortality has been observed for both men and women in almost all age groups (Fig. 4). At the same time, total mortality (Fig. 2) and cardiovascular mortality has risen as well as cardiovascular and chronic bronchitis morbidity (Table 17), especially among women.

Several hypotheses are possible with regard to the reason for the decrease in estimated tobacco-related mortality.

Table 17. Cardiovascular diseases and chronic bronchitis morbidity, Ukraine  
(No. of new cases per 100 000 population aged 15+ years)

	Cardiovascular diseases			Chronic bronchitis		
	Total	Male	Female	Total	Male	Female
1993	3306.3			210.2		
1994	3293.2			201.2		
1995	3266.3			205.5		
1996	3329.4	3264.8	3382.9	206.5	247.1	172.9
1997	3536.1	3435.4	3619.5	219.7	257.9	188.1
1998	4002.5	3874.6	4108.6	230.3	273.5	194.4
1999	4638.8			235.9		
2000	5590.8			236.1		
2001	5712.7	5300.5	6056.2	241.0	274.2	213.4
2002	5731.0	5281.6	6102.8	245.5	280.8	216.4
2003	6066.8	5364.5	6139.5	261.7	293.5	218.2
2004	6360.1	5611.4	6458.6	274.5	298.7	235.9
2005	6178.0	5427.8	6331.5	262.2	288.8	222.2
2006	6187.9	5424.6	6375.1	255.9	279.1	218.4

Source: Ministry of Health (unpublished data).

The first is that tobacco-related mortality really decreases due to a reduction in the toxicity of tobacco products. There do not, however, appear to be any arguments in support of this hypothesis other than a fall in the percentage of non-filter cigarettes smoked in Ukraine.

The second hypothesis is that the number of deaths due to lung cancer is really decreasing because of other causes of death developing earlier in life. Smokers do not have enough lifetime to develop lung cancer and die from it.

The third hypothesis is that the real incidence of lung cancer is not falling: people are suffering and dying of lung cancer while it is easier to certify death from a cardiovascular disease.

Lung cancer mortality in males (aged 0–64 years) was much higher in Ukraine than the average for the European Region (in 2005 it was 41 and 33 per 100 000, respectively), while for men of 65+ years it was lower in Ukraine than the European Region average (in 2005 it was 299 and 371, respectively) (33). In the group aged 30–44 years, male lung cancer mortality in Ukraine was the third highest in Europe after Hungary and the Republic of Moldova, exceeding the average European rate 1.4-fold. So it is possible that a decrease in lung cancer mortality in Ukraine is caused by an increase in the other causes of death, especially among the middle-aged population.

Lung cancer mortality and morbidity levels are much lower than the average in those regions of Ukraine which have a low smoking prevalence such as Volyn, Rivne, Ivano-Frankivsk, where smoking prevalence is 19–20% and morbidity for males is 40–60 per 100 000 and for females 4–10 per 100 000). At the same time, lung cancer mortality and morbidity is much higher than average in those regions which have a high smoking prevalence, such as Dnipropetrovsk, Donetsk, Kherson, Zaporizhya, where smoking prevalence is 28–30% and morbidity for males is 76–86 per 100 000 and for females 12–14 per 100 000).

## Conclusions

Tobacco-related mortality is very high in Ukraine. While lung cancer mortality is decreasing it is more than compensated for by cardiovascular mortality and morbidity, which have been rapidly increasing in recent years. Tobacco control policies have a great potential for reducing general mortality and morbidity in Ukraine.

## Recommendations

Estimates of tobacco-related diseases and deaths would be more accurate if there was mandatory documentation of smoking status in medical records and death certificates.

Well-designed studies are needed to solve issues related to the dynamic of tobacco-related mortality.

## Conclusions with regard to tobacco consumption and tobacco-related harm

According to international experience of the development of the tobacco epidemic, most of the features of the second phase of this epidemic are now visible in Ukraine, as follows:

During this phase of the epidemic, which may span two to three decades, prevalence of smoking among men continues to rise rapidly reaching the peak somewhere in the range of 50–80%. The proportion of ex-smokers is relatively low. Smoking prevalence among women typically lags behind that of males, but is increasing rapidly. Smoking prevalence may be similar among different socioeconomic classes and, if anything, may even be slightly higher among the upper-classes.

Tobacco control activities during this phase are generally not well developed. Education and information about the hazards of tobacco are unsystematic and sporadic. Lack of public and political support may prevent the successful implementation of tobacco control measures, in part because the risks of tobacco use may still not be widely understood. (34)

On the other hand, the Ukrainian situation bears some features of the beginning of the third phase. This is described as follows:

Male prevalence begins to decline, quite possible after exceeding 60% for an extended period, to around 40% at the end of this stage, which may last for three decades or so. Prevalence tends to be lower among middle-aged and older men, many of whom have become ex-smokers.

Perhaps the most dominant characteristic of this period is the rapid rise of smoking-attributable mortality, with the level for males rising from about 10% of all deaths to about 25–30% within three decades. Female deaths due to tobacco are still comparatively low (about 5% of all deaths), but rising. (34)

Conditions for successfully enacting and implementing a comprehensive tobacco control law are more favourable. Smoke-free public places and transport are among the standard measures but smoke-free workplaces are not yet common. Systematic programmes on tobacco are often initiated in schools. The media play a key role in whether comprehensive tobacco control policy based on legislation can be introduced. By this time smoking is changing from being socially acceptable behavior to socially abnormal behavior.

Thus, according to smoking prevalence data, the situation in Ukraine corresponds to the description of the second phase of tobacco epidemic. On the basis, however, of the very high level of smoking-attributable deaths among males, resulting from a high smoking prevalence over a very long time, the situation generally corresponds to the third stage.

It is extremely urgent for tobacco control measures to be brought in if the expected rise in deaths in the third stage of the tobacco epidemic is to be prevented.

### 3. Tobacco-related economic data

#### Tobacco consumption

It is hard to estimate tobacco consumption in Ukraine because statistical data for tobacco sales represent less than half of the tobacco market. For example, in 2006, an unpublished State Statistics Committee report showed that only 46.34 billion pieces of tobacco products were sold. The so-called legal sale (production+import–export) was also used to estimate consumption (Table 18). However, the legal market can differ considerably from real cigarette consumption: it can be less when there is a high level of smuggling into the country (as in 1999–2000), and it can be more when there is a high level of smuggling out of the country (as has been the case since 2003).

Table 18. Cigarette production, export and import in Ukraine (billion cigarettes)

Year	Production	Export	Import	Legal sale (production+import–export)
1992	57.7	5.3	1.2	53.6
1993	42.4	8.5	0.3	34.2
1994	47.1	4.6	6.5	49
1995	48.0	13.8	0.4	34.6
1996	44.9	9.3	4.2	39.8
1997	54.4	3.3	6.6	57.7
1998	59.1	3.7	5.6	61.0
1999	53.7	5.7	3.4	51.4
2000	58.7	6.9	1.8	53.6
2001	69.7	3.0	2.2	68.9
2002	81.0	2.6	1.6	80.0
2003	96.6	2.9	2.0	95.7
2004	108.9	5.3	1.9	105.5
2005	120.1	6.5	2.6	116.2
2006	120.4	6.5	2.7	116.6
2007	128.6	9.0	3.9	123.5

Source: State Statistics Committee (unpublished data).

According to the *Tobacco Reporter* (July, 1996) “manufacturers estimate that Ukrainians consumed 60 to 65 billion pieces in 1995, including domestic production, import, and smuggled cigarettes” (35). The Ukrainian Tobacco Association estimated (submission to the FCTC public hearings in 2000) that the overall market declined from 80 billion cigarettes in 1990 to 65–70 billion cigarettes in 1999. Subsequently the tobacco market started to grow and tobacco industry experts estimated real consumption in 2007 to be 90–95 billion cigarettes as a maximum (36).

Based on the national survey data of June 2001 (12), the estimated level of tobacco consumption was 67.4 billion cigarettes. The same method of calculation, but using the data of the national survey of June 2005 (15), revealed that in 2005 total consumption was 84 billion cigarettes.

It can reasonably be suggested that in the 1990s, the annual consumption of cigarettes was about 60–70 billion pieces, increasing after 2000 to 80–90 billion cigarettes.

### ***Types of tobacco product used***

According to the national survey of 2005 (15), the consumption of smokeless tobacco or smoking of pipes is negligible. More than 99% of all smokers smoked only manufactured cigarettes. Smoking hand-rolled cigarettes was limited to old male smokers. Among male smokers, 61% used regular cigarettes and 38% smoked low-tar or light cigarettes, although 57% of the youngest age group smoked light cigarettes. A majority of female smokers in all age groups smoked light cigarettes. Cigars are smoked by 1% of male smokers.

In 1995–1997, about 60% of the cigarettes consumed in Ukraine were non-filter. In the years after 2000, despite a general increase in cigarette consumption, the consumption of non-filter cigarettes fell. In 2005, the legal sale of non-filter cigarettes was 14.7 billion pieces. Some smuggling of non-filter cigarettes from the Republic of Moldova and the Russian Federation was possible, so their consumption could be estimated as 15 billion. As the general consumption of cigarettes in Ukraine was 84 billion (see above), it appears that only 18% of the cigarettes consumed in 2005 were non-filter ones.

According to the national survey of June 2001 (12), 33% of smokers smoked cigarettes costing less than Hrv 1 per pack (usually meaning non-filter cigarettes). In the national survey of June 2005, 15.5% of respondents indicated that they smoked non-filter cigarettes.

In 2007, 8.5 billion non-filter cigarettes were produced in Ukraine.

To summarize, while in the 1990s non-filter cigarettes constituted more than 50% of general tobacco consumption, in 2007 this had fallen to about 10%.

### ***Conclusions and recommendations***

Cigarette consumption has increased in the years following 2000. Currently, most cigarettes smoked are filter cigarettes. The change in consumption patterns is mainly caused by the replacement of old male non-filter cigarette smokers, who die or stop smoking, by young male and female smokers who prefer more expensive filter cigarettes, especially low tar ones. Awareness campaigns about the dangers of low-tar cigarettes are needed, especially as they may be expected to help to reduce the take-up of smoking and to increase the rates of stopping smoking.

### **Cultivation of tobacco**

Tobacco is grown in some southern and western regions of Ukraine. The area under tobacco production declined from 21 700 ha in 1980 to 480 in 2006 (Table 19), which constituted about 0.001% of the area under agricultural crops. Tobacco production was very high in the 1980s

(28 190 tons in 1987), before declining year on year to 340 tons of raw tobacco in 2006 – 1.2% of the 1987 level.

Table 19. Production of raw tobacco, Ukraine, 1980–2006

Year	Area under tobacco (ha x 1000)	Yield per ha (in metric tonnes)	Production (000 metric tonnes)			
			All farms	Agrarian enterprises	Household farms	Farmers
1980	21.73	0.74	15.98	15.97	0.01	–
1981	19.49	0.87	17.03	17.02	0.01	–
1982	21.07	0.8	16.88	16.87	0.01	–
1983	20.57	0.81	16.59	16.58	0.01	–
1984	19.68	0.7	15.38	15.37	0.01	–
1985	17.94	0.83	14.90	14.87	0.02	–
1986	18.26	1.28	23.41	23.39	0.02	–
1987	18.32	1.53	28.19	28.17	0.02	–
1988	16.31	1.37	22.36	22.33	0.03	–
1989	12.82	1.05	13.46	13.43	0.03	–
1990	10.56	1.18	12.42	12.40	0.02	–
1991	10.02	1.20	12.08	12.04	0.04	–
1992	8.57	1.05	8.99	8.85	0.13	0.01
1993	8.16	0.87	7.14	6.09	1.01	0.04
1994	7.03	0.78	5.51	4.37	1.12	0.02
1995	5.70	0.72	4.08	2.89	1.17	0.02
1996	3.70	0.67	2.46	1.54	0.90	0.02
1997	3.14	0.89	2.79	1.64	1.05	0.10
1998	3.43	0.73	2.50	0.81	1.51	0.19
1999	3.98	0.82	3.26	1.40	1.62	0.24
2000	3.70	0.83	3.02	1.17	1.85	–
2001	2.68	0.81	2.18	–	–	–
2002	1.73	0.94	1.63	0.92	0.71	–
2003	1.42	1.02	1.45	0.81	0.65	–
2004	1.50	0.76	1.14	0.89	0.25	–
2005	0.62	0.79	0.49	0.30	0.19	–
2006	0.48	0.72	0.34	0.14	0.20	–

Source: State Statistics Committee (unpublished data).

The yield per hectare was about 0.8 tonnes in the early 1980s, which increased to 1.5 in 1987 and then fell again to 0.67 in 1996. Recently the average yield per hectare was about 0.8 tonnes.

### ***Conclusions and recommendations***

The cultivation of tobacco is falling despite the increase in tobacco consumption. Tobacco control policies can hardly have much influence on tobacco-growers as they could change general tobacco consumption only by a few percent a year.

### **Tobacco production and employment**

An overview of tobacco production until 2001 is presented in the *Economics of tobacco control in Ukraine from the public health perspective* (12). Table 20 shows the production of raw and fermented tobacco from 1996 to 2006.

Cigarette production more than doubled between 1999 and 2005 (Table 21). Currently, it is 1.5 times higher than in Soviet times.

Table 20. Production, export and import of raw and fermented tobacco, Ukraine, 1996–2006 (tonnes)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Raw tobacco	2 460	2 790	2 500	3 260	3 020	2 180	1 630	1 450		2 587	2 275
Fermented tobacco	4 565	3 589	3 131	6 273	5 643	3 683	4 113	3 277	7 217	5 183	6 080
Import	39 169	41 217	51 231	49 136	42 231	43 434	54 283	66 308	75 169	79 018	74 408
Export	440	519	683	1 579	5 080	3 214	3 065	1 860	2 010	750	2 006

Source: State Statistics Committee (unpublished data).

Table 21. Production of cigarettes, Ukraine, 1999–2007 (billion pieces)

Factories	1999	2000	2001	2002	2003	2004	2005	2006	2007	
<b>Total joint ventures</b>	<b>49.26</b>	<b>55.41</b>	<b>65.28</b>	<b>76.89</b>	<b>92.27</b>	<b>104.35</b>	<b>116.61</b>	<b>118.24</b>	<b>127.2</b>	
Philip Morris (Kharkiv)	9.43	14.06	19.08	19.30	23.59	31.08	37.49	39.72	42.73	
B.A.T. (Priluki)	6.40	10.77	19.01	24.02	24.28	23.98	22.41	18.22	17.6	
Reemtsma (Kiev)	15.49	11.86	13.68	20.87	21.59	20.41	23.80	26.04	29.46	
Gallagher (Cherkassy)	12.67	10.29	6.13	5.80	13.74	17.55	18.05	17.74		
JTI (Kremenchuk)	5.27	8.43	7.38	6.90	9.07	11.33	14.86	16.52	37.41	
<b>Total Ukrainian factories</b>	<b>4.46</b>	<b>3.38</b>	<b>4.08</b>	<b>4.13</b>	<b>4.6</b>	<b>4.16</b>	<b>3.39</b>	<b>2.16</b>	<b>1.4</b>	
Pheodosia	1.06	0.71	1.71	1.70	1.18	0.71	0.71	<b>closed</b>		
Dnipropetrovsk	0.53	0.39	0.15		0.20	0.04	<b>closed</b>			
Odessa	0.04	0.05	0.02		<b>closed</b>					
Monastyrishce	0.65	0.29	0.44	0.72	1.06	0.58	0.80	0.95	0.19	
Kamenets-Podolsky	2.18	1.05	0.31		0.07	0.04	0.02	<b>closed</b>		
Donetsk		0.4	0.36		0.53	0.99	0.77	0.75	0.37	
Lviv		0.37	0.63	0.84	1.09	1.43	0.75	<b>closed</b>	0.45	
Others		0.12	0.46		0.47	0.37	0.34	0.46	0.39	
<b>TOTAL</b>		53.7	58.7	69.44	81.02	96.87	108.51	120.1	120.4	128.6

The state tobacco and cigarette monopoly was dismantled in the early 1990s. As elsewhere in eastern Europe, transnational tobacco companies (TTC) developed joint ventures with the former state-run companies. Foreign investors established joint ventures with 6 of the 11 cigarette factories operating in Ukraine. In 1994–1998, the production share of six joint ventures increased from 79% to 93%. In 1999, despite the closure of the RJR-JTI factory in Lviv, the production share of five joint ventures was 92%, increasing to 99% in 2007.

### ***TTC factories***

The production share of Reemtsma, BAT and RJR-JTI in 1994–2000 was more or less stable: 40%, 17% and 17%, respectively. Philip Morris increased its share from 4% in 1994 to 25% in 2000. In 2001, the production shares of Philip Morris, Reemtsma and BAT were almost equal – 27–28%, with 11% for JTI. In 2001, Reemtsma sold one of its two Ukrainian factories (in Cherkassy) to Gallagher; since 2007, as JTI merged with Gallagher, the same factory in Cherkassy has belonged to JTI. In 2002–2005, the average production shares were the following: Philip Morris – 27%; BAT – 23%; Reemtsma – 21%; Gallagher – 14%; JTI – 11%; non-TTC factories – 4%. In 2007, production shares increased for Philip Morris to 33.6%, for JTI (merged with Gallagher) to 29.4% and for Reemtsma to 23.1%, and decreased for BAT to 13.8% and for non-TTC factories to 1.1%.

### ***Medium and small factories***

In 2000 there were eight medium-sized factories, with an annual production for each one in 1995–2000 of 0.05–3 billion pieces. Of the old factories, only Monastyrische factory worked at the same rate; the Dnipropetrovsk, Odessa, Pheodosia and Kamenets-Podolsky factories decreased their production and were closed. The new factories (in Donetsk and Lviv) increased production in 2001–2004 and then decreased it (Table 21). The Lviv factory stopped operations in 2006 but restarted in 2007 following investments from the Russian Federation.

In 2001, 11 small enterprises produced 462 million cigarettes (0.67% of total production). In 2007, only two small enterprises (Dana and Dubek) were still operating.

### ***Employment and salaries***

Total employment in tobacco factories fell by 38% from 7680 people in 1996 to 4782 people in 2006 (Table 22), while total cigarette production within the same period increased 2.7-fold. Thus any policy supporting an increase in cigarette production would not bring about an increase in employment at the tobacco factories. In 1998, R.J. Reynolds closed a factory in Lviv and 620 workers were discharged.

Table 22. Employment and salaries (in Hrv) in tobacco industry, Ukraine

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No. of employees	7680	7330	7304	6687	6156	5777	5448	5182	5080	5045	4782
Average monthly salary in tobacco industry	394	500	777	1250	1302	1551	1739	2063	2640	3034	3601
Average monthly industrial salary	153	173	186	220	302	406	485	591	743	967	1212

Source: State Statistics Committee (unpublished data).

Average salaries at cigarette factories are rather high compared to other kinds of industrial salaries. However, while in 1999 the average salary in the tobacco industry was almost six times higher than the average industrial salary in Ukraine, in 2006 it is under three times higher.

### ***Conclusions and recommendations***

Total cigarette production in 1996–2006 increased 2.7-fold but employment in tobacco factories within the same period fell by 38%. Tobacco control policies will have little influence on employment at tobacco factories, but those people who stop smoking will spend their money on other goods instead of cigarettes, which could be beneficial for employment in other industries.

### **Tobacco prices**

Real (inflation-adjusted) prices of tobacco products increased only in 1991, 1992, 1997, 1998 and 1999, when the consumer price index (CPI) for tobacco was higher than the general CPI (Table 23). In 1999–2006, total inflation was 98% while the prices of tobacco products only rose by 16.7%, so that the real price for tobacco products during that period fell by 30%.

Table 23. Consumer price indices, December previous year, Ukraine (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
All goods and services	390	2 100	10 256	501	281.7	139.7	110.1	120	119.2	125.8	106.1	99.4	108.2	112.3	110.3	111.6	116.6
Tobacco products	440	3 040	8 900	260	190	120	111.6	183.9	125.6	105.6	98.8	99.6	104.3	102.8	102.5	102.2	107.2
Producer price index: cigarettes			7 280	510	230	120	115.1	148	135.5	115	97.9	104.8	104.7	101.6	96.8	103.8	104.2

Source: State Statistics Committee (unpublished data).

In fact, the real fall in price decrease was even greater. The increase in price of tobacco products was partly caused by the decreased proportion of cheap non-filter cigarettes in total tobacco consumption. The nominal price for a pack of 20 non-filter cigarettes fell from Hrv 0.92 in December 1999 to Hrv 0.8 in December 2007, or by 15%. For filter cigarettes, the nominal price increased from Hrv 2.11 in December 2001 to Hrv 2.52 in December 2006, just 19% in six years, while the inflation rate in 2001–2007 was 74%. Thus, the real price fell by 46%.

### ***Conclusions and recommendations***

Real (inflation-adjusted) prices of cigarette have been falling since 1999. This has probably been the main factor in the recent increase in smoking prevalence (Fig. 5). An effective taxation policy ensuring a substantial increase in the real prices of cigarette has great potential for overcoming the tobacco epidemic.

## **Tobacco expenditure of the population**

Estimates of population expenditure on legal tobacco products based on the official statistical data on prices and sales are presented in Table 24. In 2001, estimated expenditure was Hrv 6329 million or US\$ 1178 million (12). At that time cigarette smuggling into and out of Ukraine was almost equal in money terms, so the figures above are a good estimation of real population spending on tobacco. In 2005, this expenditure (based on legal sales) was Hrv 12 billion or US\$ 2.3 billion. However, while the legal sale was 116 billion cigarettes, real consumption was just 84 billion, meaning that 32 billion cigarettes (predominantly filter ones) were first sold in Ukraine and then smuggled to EU countries. Taking this into account, a recalculation of population expenditure gives Hrv 8331 million or US\$ 1626 million for 2005 (Table 24). Tobacco industry experts gave a close estimate of the tobacco market in 2004 as Hrv 7.5–8 billion. So the real population expenditure on tobacco in 2005 was just 70% of the legal sale of cigarettes. In 2007 the volume of legal sales was Hrv 14.4 billion.

### ***Conclusions and recommendations***

Ukrainians currently spend more than Hrv 8 billion on tobacco products annually. If (as a result of tobacco control policies) just 1% stop smoking, about Hrv 80 million will be spent on other goods and services which could benefit the country's economic life.

Table 24. Estimates of the legal cigarette market, Ukraine, 1999–2007

Year	Kind of cigarette	Nominal average price (kopecks per pack)	Legal sale (billion cigarettes)	Amount of sales (Hrv million)	Amount of legal market (Hrv million)	Total legal sale (billion cigarettes)	Average weighted price (kopecks per pack)	Excise tax revenue (including Pension fund) (Hrv million)	Proportion of excise tax in legal market	Legal market (US\$ million)
1999	filter	117.08	28	1 639.12						
	non-filter	76.33	20	763.3						
	import	244.08	3.4	414.94	2 817	51.4	109.62	549.4	19.50	682.1
2000	filter	142.33	39	2 775.4						
	non-filter	92.5	12.5	578.1						
	import	303.58	1.8	273.2	3 627	53.3	136.09	574.6	15.84	666.6
2001	filter	210	53.86	5 655.3						
	non-filter	89.83	15	673.7	6 329	68.86	183.82	726.1	11.47	1178.1
2002	filter	206	61.85	6 370.6						
	non-filter	76.17	18.15	691.2	7 062	80	176.54	861.9	12.21	1325.8
2003	filter	212.8	75.55	8 038.5						
	non-filter	73.1	20.16	736.8	8 775	95.71	183.37	1 085	12.36	1645.6
2004	filter	220	88.3	9 713.0						
	non-filter	72	17.2	619.2	10 332	105.5	195.87	1 427.2	13.81	1942.4
2005	filter	224	101.9	11 412.8						
	non-filter	74.5	14.4	536.4	11 949	116	206.02	1 782	14.91	2331.7
2005 <sup>a</sup>	filter	224	69.6	7 795.2						
	non-filter	74.5	14.4	536.4	8 332	84	198.37			1625.8
2006	filter	226	105	11 865.0						
	non-filter	75	11.6	435.0	12 300	116.6	210.98	1 962	15.95	2435.6
2007	filter	245	115	14 087.5						
	non-filter	77.6	8.5	329.8	14 417	123.5	233.48	2 490	17.27	2854.9

<sup>a</sup> Estimates of market excluding the smuggling of Ukrainian cigarettes to EU countries.  
Source: State Statistics Committee (unpublished data).

## Tobacco taxes and revenue

### Taxes

The current level of tobacco taxes in Ukraine is presented in Table 25.

Table 25. Excise tobacco taxes and import duties, Ukraine, June 2008

Product	Specific excise tax (Hrv)	Ad valorem excise tax (%)	Import duty, privileged (€)	Import duty, full (€)
Cigars, cigarillos (for 100 pieces)	30	8	5	10
Filter cigarettes (for 1000 pieces)	14	12.5	3	5
Non-filter cigarettes (for 1000 pieces)	5	12.5	3	5
Smoking tobacco (for 1 kg)	12	10	2.5	5
Smokeless tobacco (for 1 kg)	5	8	2.5	5
Raw tobacco (for 100 kg)	0	0	1	2

The law states that “total excise (specific and ad valorem) for each brand of tobacco products should not be lower than Hrv 8 per 1000 non-filter cigarettes and Hrv 18 per 1000 filter cigarettes”.

According to the law, the ad valorem tax is taken “as percentage of the turnover of commodity sale”. The turnover is defined as being equal to the maximum retail price without value-added tax (VAT) and excise duty.

The total excise tax for cigarettes in 2007 was only 16–30% of the maximum retail price. In 2008, this was changed to 13–33%.

The average total tax percentage in the maximum retail price in 2007 was 36.5% for non-filter cigarettes and 34% for filter cigarettes. The tax percentage is half that in the EU, where it should be not lower than 70%.

The excise taxes on domestic and imported cigarettes are equal. VAT on cigarettes is the same as VAT on all other goods (at present 20%). The excise tobacco taxation policy is discussed below in the section under tobacco taxation and price policy.

### **Revenue**

Between 1996 and 1999, the tobacco excise tax rates increased annually and the budget revenue also substantially increased, from Hrv 54 million (US\$ 30 million) to Hrv 552 million (about US\$ 133 million). In 1999–2003 the excise tax was levied in two forms: general excise and tax for the Pension Insurance Fund, the sum of which need to be considered in order to see the revenue trend (Table 26).

Table 26. Tobacco excise revenues, Ukraine, 1996–2007 (Hrv million)

Year	Tobacco excise	Pension tax	Total	All tax revenues	Tobacco excise revenues proportion (%)
1996	54	–	54	–	–
1997	129	–	129	–	–
1998	287	–	287	–	–
1999	522	30	552	14 168	3.90
2000	444	128	572	19 560	2.94
2001	592	143	735	21 958	3.35
2002	697	178	875	28 934	3.02
2003	887	220	1107	54 320	2.02
2004	1471	–	1471	63 161	2.32
2005	1779	–	1779	98 065	1.82
2006	2022	–	2022	125 743	1.61
2007	2440	–	2440	161 264	1.51

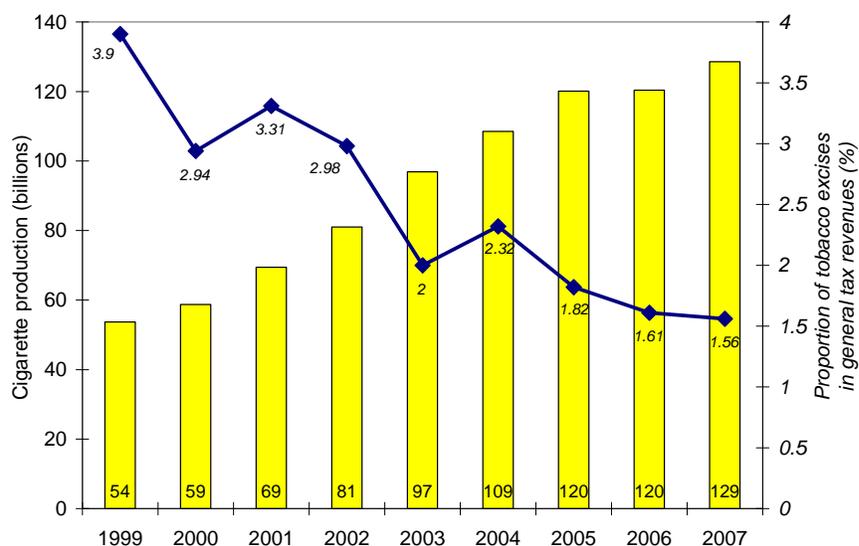
Source: Ministry of Finance and State Tax Administration (unpublished data).

In 1999 the proportion of excise tobacco taxes in total tax revenues was about 4%. It then decreased almost every year to 1.51% in 2007.

### **Conclusions and recommendations**

Tobacco tax rates are very low. The proportion of tobacco taxes in total tax revenue in 2007 was falling despite the increase in tobacco production (Fig. 6). An effective increase in tobacco tax rates could ensure both a reduction in tobacco consumption and an increase in total tax revenues.

Fig. 6. Cigarette production and tobacco excise as a proportion of general tax revenues, Ukraine, 1999–2007



## Foreign trade

### *Cigarettes*

Since 1999, exports of cigarettes have exceeded imports by quantity, but the average price of imported cigarettes has been higher than that of exported ones, so the balance of the cigarette trade has changed from –US\$ 6 million in 2003 to +US\$ 54 million in 2007 (Table 27).

Cigarettes are exported mainly to the countries of the former Soviet Union (Armenia, Azerbaijan, Belarus, Georgia and the Republic of Moldova), but recently large quantities of cigarettes produced in Ukraine have been exported to countries such as Iran, Mongolia, Taiwan and Turkey. Cigarettes are mainly imported from Germany, Greece, the Russian Federation and Switzerland.

### *Raw tobacco*

While domestic tobacco production needs more raw tobacco than the country can produce, some Ukrainian tobacco is exported. In 2000–2007, the import of raw tobacco increased almost twice to 81 776 tons.

In 1996, 41 000 tons of raw tobacco (production + import – export) were used to produce 45 billion cigarettes, or almost 1 g per cigarette. In 2007, 80 854 tons of raw tobacco were used to produce 128.6 billion cigarettes, or just 0.63 g per cigarette. So, as in other countries, cigarettes have become lighter.

### *Foreign trade balance*

The balance of the general tobacco trade is negative. In 1997–2000, combined import spending exceeded export earnings by US\$ 592 million (Table 23). In 2002–2006, the balance was even

worse: US\$ 1019 million. Between 1996 and 2007, US\$ 1915 million was lost on the foreign tobacco trade.

Table 27. Balance of foreign trade in tobacco, Ukraine, 1996–2007

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<i>Raw tobacco</i>												
Export (tonnes)	440	519	683	1579	5080	3214	3065	1860	2010	750	492	922
Export (million US\$ )	0.6	0.88	1.37	2.7	6	4.1	2.56	2.1	2.35	3.42	2.45	1.87
Import (tonnes)	39 169	41 217	51 231	49 136	42 231	43 434	54 283	66 308	75 169	79 018	74 408	81 776
Import (million US\$ )	58.7	94.2	125.8	110.9	107.9	110.6	131.5	154.0	204.2	234.5	236.26	296.17
Balance (tonnes)	38 729	40 698	50 548	47 557	37 151	40 220	51 218	64 448	73 159	78 268	72 402	80 854
Balance (million US\$ )	-58.1	-93.32	-124.4	-108.2	-101.9	-106.5	-128.9	-151.9	-201.8	-231.1	-231.3	-294.3
<i>Cigarettes</i>												
Export (million pieces)	9 264	3 336	3 651	5 691	6 861	3 019	2 626	2 932	5 300	6 500	6 471	8 984
Export (million US\$ )	28.9	27	29	57.5	66.5	28	25.30	31.4	52.05	68.66	69.61	114.5
Import (million pieces)	4 239	6 600	5 634	3 014	1 838	2 178	1 606	2 038	1 891	2 628	2 668	3 937
Import (million US\$ )	18.8	69.5	78.1	37.9	24.5	24.3	23.8	37.34	30.13	39.82	38.29	60.44
Balance (million pieces)	5 025	-3 264	-1 983	2 677	5 023	841	1 020	894	3 409	3 872	3 803	5 047
Balance (million US\$ )	10.1	-42.5	-49.1	19.6	42.0	3.7	1.50	-5.94	21.92	28.84	31.32	54.06
<i>Other tobacco</i>												
Export (tonnes)	285	156	19	300	859	1 845	3 533	4 028	2 923	5 177	7 654	6 169
Export (million US\$ )	0.7	0.38	0.03	1.1	4.3	8.9	17.50	21.75	14.84	17.29	35.8	47.3
Import (tonnes)	800	1924	844	1 194	3 590	5 530	8 521	9 924	9 743	15 574	13 141	13 225
Import (million US\$ )	2.9	7.5	1.9	2.4	11.1	23.4	35.2	42	40.5	82.65	58.2	60.6
Balance (tonnes)	-515	-1 768	-825	-894	-2 731	-3 685	-4 988	-5 896	-6 820	10 397	-5 487	-7 056
Balance (million US\$ )	-2.2	-7.12	-1.87	-1.3	-6.8	-14.50	-17.70	-20.25	-25.66	-65.36	-22.40	-13.3
<b>TOTAL BALANCE (million US\$ )</b>	<b>-50.2</b>	<b>-142.9</b>	<b>-175.4</b>	<b>-89.9</b>	<b>-66.7</b>	<b>-117.3</b>	<b>-145.1</b>	<b>-178.1</b>	<b>-205.6</b>	<b>-267.5</b>	<b>-222.4</b>	<b>-253.6</b>

Source: State Statistics Committee (unpublished data).

The negative balance is mainly caused by: (i) most raw tobacco being imported by Ukrainian factories; (ii) the higher prices of imported raw tobacco and cigarettes; and (iii) the enormous smuggling of cigarettes produced in Ukraine from legally imported raw tobacco. Thus if cigarette smuggling from Ukraine were to be reduced, the legal trade balance would improve.

### ***Conclusions and recommendations***

In 1996–2007, Ukraine lost almost US\$ 2 billion in the foreign tobacco trade, meaning that smokers were investing this amount in other countries' economies. A reduction in tobacco consumption could improve the trade balance and former smokers' money could be used to buy locally produced goods.

## **Smuggling**

The overview of tobacco smuggling in 1993–2001 is presented in *Economics of tobacco control in Ukraine from the public health perspective (12)*. Since 2001, smuggling into and out of the country have developed in opposite ways.

### ***Smuggling into Ukraine***

Cigarette smuggling into the country has fallen from 20% of general consumption in 2000 (12) to 5% in 2005 (15). The tobacco industry states that excise tax rates should be stable in Ukraine to prevent cigarette smuggling from the Russian Federation consequent upon differences in tax rates. In 2006–2008, however, the excise tax rates for cheaper brands of cigarette were higher in the Russian Federation than in Ukraine, creating incentives for cigarette smuggling from Ukraine to the Russian Federation rather than vice versa.

### ***Smuggling out of Ukraine***

In 2005, legal sales of cigarettes in Ukraine (production + import – export) were 116 billion pieces and consumption was just 84 billion, meaning that 32 million cigarettes were first sold in Ukraine (with payment of all taxes) and then smuggled to other countries, predominantly to Hungary, Poland and other EU countries where cigarette prices are much higher than in Ukraine. This kind of smuggling is called bootlegging; in Ukraine it is undertaken both by individuals and organized criminal groups.

Cigarette-smuggling out of the country is on the increase. According to the State Customs Service, 76 million cigarettes were seized in Ukraine in 2007 – 60% more than for the same period in 2006. Further reports from the customs authorities include:

- 175 000 packs of Priluki and Next cigarettes (produced in Ukraine) seized on the Hungarian border (7 April 2008);
- 470 000 packs of Marlboro and L&M cigarettes seized in a lorry heading for Latvia (27 August 2004);
- 116 540 packs of Marlboro cigarettes seized on the Polish border (6 March 2006);
- 162 150 packs of Ronson, Viceroy, Prima, Camel and Lucky Strike seized in a railway carriage going to the Czech Republic (25 December 2006);
- 210 000 packs of Ronson seized on the Romanian border (11 May 2007).

In addition, 400 000 packs of Ukrainian-made cigarettes (with Ukrainian as well as British health warnings) were seized in Poland.

Only wholesale traders could have bought such large numbers of cigarettes, and tobacco producers could easily find out which of their wholesale partners were selling cigarettes to smugglers.

### ***Transit smuggling***

Ukraine is also used for the transit smuggling of cigarette brands which are not produced in the country. According to the Ukrainian customs reports to the media, at least seven big seizures of Super Kings and Regal cigarettes were made in 2004–2008 totalling 1.55 million packs or 31 million cigarettes.

Regal and Super Kings are British brands, not at all popular in Ukraine. They are made in the United Kingdom and exported to countries where there is no market for them. They then “disappear” and, through third countries (including Ukraine), are illegally returned to the United

Kingdom. Bearing in mind that the excise tax yield in 2005 in the United Kingdom was €221 per 1000 cigarettes, the British tax yield would have been more than €6 million greater from these seizures of smuggled cigarettes alone.

### ***Conclusions and recommendations***

In 2000, tobacco smuggling changed direction: at present cigarettes are mainly smuggled from Ukraine to EU countries. A substantial tax increase in Ukraine might well reduce the volumes smuggled. Seizures of huge numbers of cigarettes produced in Ukraine and smuggled to other countries reveal that tobacco producers have no real incentives to prevent smuggling. An agreement on the prevention of smuggling between the government of Ukraine and the major tobacco producers, based on EU experience, could improve the situation. One of the measures to prevent smuggling could be to sell seized Ukrainian-made cigarettes back to the producers at the maximum retail price.

### **Conclusions based on tobacco-related economic data**

Although it is commonly believed that tobacco is bad for the health but good for the economics, tobacco-related economic data in Ukraine do not support this belief for the following reasons:

- the cultivation of tobacco is disappearing;
- employment in tobacco factories is falling despite the growth in cigarette production;
- US\$ 2 billion has been lost through the negative foreign trade balance in tobacco;
- there are high volumes of cigarette-smuggling from Ukraine to the EU;
- real cigarette prices are falling, encouraging an increase in smoking prevalence;
- the proportion of tobacco taxes in the government tax take is declining.

Comprehensive tobacco control policies, especially an increase in tobacco tax, could be beneficial both for public health and the national economy.

## **4. Tobacco control policies**

### **Political priorities and responsibilities in tobacco control**

#### ***International obligations: the WHO Framework Convention on Tobacco Control***

The WHO FCTC (37) is the first international legal agreement in public health and, as such, it imposes legal obligations. It was developed as a result of almost four years of negotiations between the 192 Members of WHO and contains a list of measures aimed at reducing the destructive impact of tobacco on health and the economies.

The text of the Convention was unanimously adopted on 21 May 2003 at the World Health Assembly by representatives of governments of all countries in the world. It entered into force

on 27 February 27 2005, on the 90th day after the date it was ratified by the 40th country. By June 2008, 157 countries had ratified the Convention.

Ukraine signed the FCTC on 29 June 2004, Parliament ratified it on 15 March 2006, and it entered into force on 4 September 2006. A delegation from Ukraine took part in the First Conference of the FCTC Parties (Geneva, February 2006) as an observer, and in the Second FCTC Conference of Parties (Bangkok, July 2007) as a party. Ukraine is a member of two working groups of the FCTC Conference of Parties: on elaboration of the guidelines for implementation of the FCTC Articles 9, 10 and 11.

### ***Law on Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on Public Health***

As early as 2000, the Ministry of Health proposed a law “On tobacco control and health protection”. This law was agreed in draft with other ministries and was prepared for consideration by the Cabinet, but in March 2001 several Members of Parliament presented a bill on restricting the consumption of tobacco products. This bill passed its first reading but did not get the necessary support for the second reading and was not accepted. In November 2003, a further draft Law (on restricting the use of tobacco products and reducing their harmful impact on health) was proposed by Members of Parliament but also fell at the second reading a year later.

In December 2004, a Member of Parliament submitted yet another draft law on preventing the use of tobacco and its harmful impact on public health. Parliament approved this law at both readings, and under its final name On Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on Public Health, it was signed by the President on 18 October 2005 and entered into force on 25 October 2005 (Annex 1), with further amendments by Parliament on 9 February 2006. Detailed consideration of the law’s provisions, its implementation and subsequent changes to it are given in the section on National Policies and Programmes below.

### ***Other domestic tobacco legislation***

As well as the tobacco control law, the following legislation also covers tobacco control issues.

1. The Law “On advertising” (advertising and sponsorship of tobacco products).
2. The Law “On the state regulation of production and turnover of alcohol and tobacco products” (licensing of production, trade, export and import of tobacco products, regulation of composition and labelling of tobacco products, some restrictions on the sale and use of tobacco products).
3. The Law “On excise duty rates for tobacco products”.
4. The Law “On moral protection of the public” (banning the production and distribution of products which promote tobacco-smoking).
5. Customs tariffs (import duty rates for tobacco and tobacco products).
6. The customs code (restrictions on the admission of tobacco products through the customs border of Ukraine on a vehicle (Article 118), tax exemption for tobacco products which are purchased by citizens on the customs territory of Ukraine (Article 253)).

7. The Criminal Code:
  - the production, storage, sale and transportation of illegal tobacco products with the purpose of sale (Article 204);
  - the illegal production, imitation, use or sale of illegally made, received or counterfeit excise stamps or control stamps (Article 216).
8. The Code of Ukraine on Administrative Offences:
  - violation of smoking bans in public transport vehicles: railway transport (Article 110), sea transport (Article 115), river transport (Article 117), buses, trams and trolleybuses (Article 119);
  - violation of rules of sale of tobacco products (Article 156);
  - violation of the established order of the industrial processing, storage, transportation or elimination of confiscated tobacco products (Article 156–2);
  - storage and transportation of tobacco products without excise stamps (Article 164–5);
  - sale of products with violation of requirements regarding health warnings on tobacco products (Article 168–2);
  - smoking of tobacco products in forbidden places (Article 175–1);
  - making, acquiring, keeping or selling falsified tobacco products (Article 177–2).

### ***National policies and programmes***

In 1992, the Law on the Basics of Legislation of Ukraine on Health Protection was adopted. Article 32 states that “a national policy of smoking limitation” is conducted.

On 29 September 1994 the Cabinet adopted Measures to Counteract Drunkenness, Alcoholism and Tobacco Use for the Period 1994–1997, which included proposals on improving legislation, prevention and medical work to counter the use of tobacco. Unfortunately, most of these measures were somewhat general and there was no provision for the resources necessary to implement more specific measures. No reports were published on the implementation of these measures.

Until the early 2000s, no government documents were adopted that were devoted primarily to tobacco-related problems and included directions and measures of national policy. On 21 June 2001, the Cabinet decided to adopt a concept for a state policy of tobacco control implementation with the aim of protecting public health from the harmful impact of tobacco-smoking and reducing the consumption of tobacco products (decision No. 667). Unfortunately, no resources were provided to implement the measures anticipated in this Concept, and it stayed a declarative document.

In January 2002, the multisectoral programme Health of the Nation for 2002–2011 was adopted. Section XIX, item 17, of this programme laid down that in 2003 a complex programme of health protection, prevention and overcoming of tobacco-smoking should be developed. This task was not carried out.

In March 2002, the Law on State Regulation of Production and Turnover of Alcohol and Tobacco Products was amended to include a special Section IV–1, “Basics of national policy on

alcohol and tobacco products consumption”, setting out the need for “establishment of economic and legal conditions which encourage reduction of tobacco products consumption”. However, this again remained but a declaration.

In 2003, the National Programme on Support of Young People for 2004–2008 was adopted. The basic directions of the Programme included encouraging a healthy way of life for young people and, specifically, carrying out awareness activities to popularize healthy lifestyles and the prevention of tobacco use, including:

- the gradual (until 2006) legislative prohibition on advertising of alcohol and tobacco products and the trade marks of these products;
- legislative prohibition on smoking in the streets and in public places;
- legislative strengthening of penalties for the sale of tobacco and alcohol products to minors.

Unfortunately, these measures were only partly implemented.

In 2005, the Law on Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on Public Health was adopted. One of the main objectives of the Law was to “determine the legal and organizational bases of the national policy aimed at preventing tobacco-smoking among children and young people and reducing the consumption of tobacco products with the ultimate goal of reducing the risk of tobacco-related diseases, disability and premature mortality”.

This law has a provision that the Cabinet “ensures the implementation of the consolidated national policy to prevent and reduce the use of tobacco products and their harmful impact on public health, and develops and approves relevant programmes” (Article 6). According to Article 7, the Ministry of Health carries out the national policy on prevention and reduction of the use of tobacco products and their harmful impact on public health. On 24 June 2005, the Ministry of Health issued Decree 311 which adopted the Complex Plan aimed at preventing and overcoming smoking in Ukraine for 2005–2010.

Article 5 of the FCTC states that “Each Party shall develop, implement, periodically update and review comprehensive multisectoral national tobacco control strategies, plans and programmes in accordance with this Convention”.

On 2 June 2007, the President sent a letter to the Prime Minister with proposals for strengthening tobacco control efforts, in which, in particular, he suggested that the government should “consider the possibility of developing the governmental programme on reduction of harmful impact of tobacco on the population health in Ukraine”. This initiative of the President was readily agreed to by the government, and on 4 June 2008 the Cabinet approved the Concept of the National Programme for Reduction of the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012 (order N 797) (Annex 2).

The objective of this Programme is to protect and promote public health, protect against the consequences of tobacco consumption and exposure to tobacco smoke, and minimize the social, environmental and economic consequences of tobacco use by implementing tobacco control measures at national and local levels.

To achieve the Programme's objectives the following policies and activities should be implemented:

- broad systematic prevention activities aimed at the whole population, especially children and young people, and directed at increasing awareness of the health hazards of tobacco-smoking, the toxic constituents of tobacco smoke and methods of stopping using tobacco;
- organization of a system to provide help with stopping the use of tobacco and treatment of tobacco dependence, with proper training of health professionals;
- annual rises in excise tax rates for tobacco products so as to ensure real price increases for these products, and measures to eliminate all forms of the illicit trade in tobacco products;
- introduction of bans on:
  - all tobacco advertising, promotion and sponsorship.
  - smoking in work- and public places.

On 13 September 2007, at the All-Ukrainian forum "Healthy Nation", the President proclaimed *The seven initiatives of the President of Ukraine to improve health of Ukrainian people (38)*. One of these initiatives is "reduction of the harmful impact of tobacco-smoking on health of the population". The content of these initiatives is presented in the forum's "Healthy nation" resolution.

The main objectives are:

1. to establish environments which encourage a reduction in smoking and exposure to tobacco smoke;
2. to reduce smoking prevalence among adults from 41% to 35%;
3. to reduce exposure to tobacco smoke from 53% to 40%.

The following measures are needed to achieve these objectives and to implement the policy effectively:

- an increase in tobacco excise taxes and the use of the additional revenues to fund health promotion activities;
- bans on all forms of tobacco advertising;
- work- and public places to be made smoke-free, increased penalties for smoking in public places, introduction of penalties for business owners for smoking at workplaces;
- development of broad information health promotion campaigns and initiation of public awareness campaigns about the dangers of active and passive smoking, its health impact and ways of protection from exposure to tobacco smoke;
- information for users of tobacco on the ways to stop smoking and provision of effective professional assistance for those who cannot stop smoking themselves;
- establishment of a network of state tobacco dependence treatment (at least one special clinic in each region);
- strengthening of penalties for selling tobacco products without a licence.

### ***Coordination of tobacco control activities***

On 12 November 1997, Cabinet Decree No. 1258 On the Coordination of the Work of Government Authorities and Public Organizations in Implementing Tobacco Control Policies to Reduce Tobacco Use established a Coordinating Board on Tobacco Control at the Cabinet of Ministers of Ukraine, headed by the Minister of Health. The Board met several times but it had neither financial nor other resources so it mainly sent recommendations to various authorities. When Ukraine's position on the FCTC negotiations had to be worked out in 2000, the Cabinet, under pressure from the tobacco industry, established a special task force on the FCTC. This contradicted the provisions regarding the Coordinating Board, which stated that the country's position in relation to participation of its representatives in international organizations, symposia, conferences and other meetings on international cooperation on tobacco control issues should be developed by the Board. After that the Coordinating Board met very rarely, until by Cabinet decision No. 753 of 18 August 2005 it was dissolved along with some other commissions, boards and working groups established earlier by the Cabinet and not active any more.

At present there is no government mechanism to coordinate tobacco control activities. The establishment of such a mechanism is required by Article 5 of the FCTC, which states that every Party should "establish or reinforce and finance a national coordinating mechanism or focal points for tobacco control". Article 6 of the tobacco control law states that the Cabinet "coordinates the governmental authorities' activities in implementing the national policy on prevention and reduction of the use of tobacco products and their harmful impact on health", and the Ministry of Health "organizes the collaboration with other central and local authorities and public organizations on issues of public health protection from the harmful consequences of the use of tobacco products".

### ***Conclusions and recommendations***

Ukraine has good potential for development of comprehensive tobacco control policies:

- the WHO FCTC has been ratified;
- the tobacco control law was adopted in 2005;
- the government has approved the concept of the national tobacco control programme.

The main problem is the lack of effective mechanisms to carry out the agreements, programmes and concepts properly and enforce the legislation.

The international obligations on Ukraine and provisions of Ukrainian legislation require the establishment of a national coordinating mechanism in the field of tobacco control. To make its work effective, it is important that this authority should be provided with proper financial and other resources and powers.

### **Regulation of tobacco advertising**

The first tobacco advertising regulation was the law On the Basics of Legislation on Health Protection, adopted in 1992. Article 32 of this law declared a total ban on tobacco advertising in any form. Unfortunately, the law did not contain mechanisms for its enforcement and was violated. In December 1994, therefore, the President issued Decree 723/94, which forbade the

advertising “of tobacco products, alcoholic drinks and other products, unhealthy for human beings”. This Decree was to be replaced by a law on advertising. The first draft of the Law on Advertising was rather weak, but during the final reading Parliament supported the amendment on a complete ban on alcohol and tobacco advertising. The law was sent for signature to the President, but he vetoed it. In July 1996, the compromise proposal was adopted by Parliament: tobacco advertising was forbidden only on radio and television (39).

In 2003, the Law on Advertising was changed to include the following amendments regarding tobacco advertising:

- in addition to television and radio, tobacco advertising was also banned on transport vehicles, indoors and through advertising activities (except for special exhibitions);
- advertising was prohibited within 300 meters of educational institutions for minors and in printed media aimed at young people;
- some restrictions concerning the content of the advertising were introduced;
- tobacco industry sponsorship for television and radio programmes, sporting and other events was banned;
- all tobacco advertisements were to contain the health warning “Smoking can cause cancer”, which should be at least 15% of the size of the advertisement.

In 2004–2005, four groups of Members of Parliament officially proposed amendments to the Law on Advertising concerning tobacco advertising, up to a total ban. None of these was, however, considered even in the first reading.

Following the 2006 election, a Member of Parliament proposed an almost complete ban on tobacco advertising, and another proposed a ban on outdoor tobacco advertising. It was not until 18 March 2008 that these proposals were adopted by Parliament, with the following amendments concerning tobacco advertising:

- the ban on outdoor tobacco advertising should take effect on 1 January 2009;
- the ban on tobacco advertising in the print media (except special publications) should take effect from 1 January 2010.

Many kinds of tobacco advertising are, however, still allowed, such as at point of sale and on the internet.

At the Healthy Nation Presidential Forum on 13 September 2007, the President urged that alcohol and tobacco advertising should be banned. In the booklet following the Forum, a ban on tobacco and alcohol advertising was promised (38).

In 2005–2007, several local councils introduced local bans on outdoor tobacco advertising. However, these were challenged in court, as bans can only be introduced under national legislation. Cherkassy city council adopted more of a compromise decision on the rules for outdoor advertising in the city which, unlike the above-mentioned decisions, is in line with the Law on Advertising. This decision bans tobacco advertising in central parts of the city but is poorly enforced.

On 24 October 2007, the Parliament of the Autonomous Republic of Crimea banned alcohol and tobacco advertising on its territory.

The Law on Advertising lays down that tobacco advertisers should pay at least 5% of the cost of their tobacco advertising for social advertising on the harm from tobacco use. The use of these payments is regulated by Decrees of the Cabinet of Ministers No. 997 of 8 September 1997 and No. 621 of 13 April 2007. However, as these payments contradict general taxation regulations, only some of the tobacco advertisers pay.

In cases of violation of the legislation on tobacco advertising, fines are imposed on advertisers and producers of advertising in accordance with Cabinet Decision No. 693 of 24 May 2004 On Adoption of Order of Fines for Violation of Legislation on Advertising. In particular, fines are imposed for tobacco advertising through promotional activities (including the free distribution of tobacco products and the exchange of some number or types of product for other tobacco products).

In general, the existing restrictions on tobacco advertising (bans on television, radio and transport, a ban on the distribution of free samples, etc.) are well enforced, but tobacco companies still have plenty of legal ways to market tobacco, such as competitions for buyers of cigarettes.

### ***FCTC and tobacco advertising, promotion and sponsorship***

According to Article 13 of the FCTC, Ukraine has to undertake appropriate legislative, executive, administrative and/or other measures for a comprehensive ban on all tobacco advertising, promotion and sponsorship within five years of the Convention entering into force, i.e. before 4 September 2011. This means that all restrictions should be well enforced before that date and as early as possible.

According to the provisions of paragraph 4 of this Article, Ukraine should:

- prohibit all forms of tobacco advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions;
- introduce a comprehensive ban on tobacco advertising, promotion and sponsorship on radio and television, in the print media and, as appropriate, other media, such as the internet;
- restrict the use of direct or indirect incentives that encourage the purchase of tobacco products by the public.

According to paragraph 5, Ukraine is encouraged to implement measures beyond the obligations set out in paragraph 4, so the proposed restrictions are the minimum rather than the maximum.

### ***Public attitude to tobacco advertising regulations***

The results of population surveys concerning the regulation of tobacco advertising are shown in Table 28. They reveal that the majority of the population supports a ban on tobacco advertising, and that between 2000 and 2005 the proportion of supporters was growing. For some respondents the negative reaction was probably caused by the very word “ban” and, while

understanding the harm done by tobacco advertising, they support tougher restrictions. It seems that proposals to strengthen the regulations on tobacco advertising up to a total ban would be supported by the vast majority of voters.

Table 28. National representative survey on tobacco advertising regulation, Ukraine, 2000–2005

Year	Agency conducting the survey	No. and age of respondents	No. wanting less severe restrictions (%)	No. wanting no change (%)	No. wanting more severe restrictions (%)	No. wanting total ban (%)
2000	Institute of Sociology (12)	1797 15+ years	5	46	No such question	49
2002	Institute of Social Research (39)	2463 15+ years	3	21	28	48
2004	Institute of Social and Political Psychology (14)	2008 18+ years		20	The rest had no answer	62
2005	Kiev International Institute of Sociology (15)	2026 15+ years	3	14	26	57

### ***Conclusions and recommendations***

The current tobacco advertising regulations are weak and do not correspond to the provisions of the FCTC and practice in other countries. In 2008, all Ukraine's neighbours enacted bans on the outdoor advertising of tobacco, but it did not. The majority of the population supports a comprehensive ban on tobacco advertising. Legislative amendments should be laid before Parliament, which are in line with the provisions of the FCTC and follow best practice in other countries on the regulation of tobacco advertising.

### **Tobacco taxation and price policy**

Tobacco taxation may be divided into three stages (12):

- 1993–1995, reduction in excise rates to encourage production;
- 1996–1999, increase in excise rates to increase government revenues;
- end of 1999–2007, stabilization of the tax rates.

#### ***Decrease in tax rates (1993–1995)***

From 1993 to 1995, the system was ad valorem taxation, with the rate based on a percentage of the retail price. In 1993, a flat rate of 70% was in effect. In 1995, this was reduced and divided into separate rates for non-filter cigarettes (10%) and filter cigarettes (40%).

The reduction in excise rates during this period had the following results:

- a considerable fall in government revenues, since the insignificant increase in production did not compensate for losses from the reduction in the excise rate;
- an increase in the share of non-filter cigarettes in total production;

- an increase in sales of smuggled cigarettes;
- a fall in the real prices for cigarettes (adjusted for inflation).

### ***Increase in tax rates (1996–1999)***

Between 1996 and 1999, the taxation system was completely replaced by a specific system with a definite sum for a certain amount of cigarettes. In 1996, the rates were ECU 2 for 1000 filter cigarettes and ECU 0.5 for non-filter cigarettes. The rates increased annually and in December 1998 they reached ECU 2.5 for both filter and non-filter cigarettes. In November 1999, the excise rates were set in the national currency: Hrv 10 per 1000 filter cigarettes and Hrv 7 per 1000 non-filter cigarettes. This was effectively a reduction in the excise rate, because at that time ECU 2.5 were equal to Hrv 12.

During this period there were the following results:

- government revenues from the tobacco excise tax grew from Hrv 53 million to Hrv 522 million per year, or from US\$ 30 million to US\$ 126 million;
- the share of non-filter cigarettes in total cigarette production dropped from 85% to 39%;
- there was less cigarette-smuggling;
- real cigarette prices (adjusted for inflation rate) rose.

### ***Stabilization of the tax rates (1999–2007)***

Since the end of 1999, tax has been stabilized, apart from small increases in the excise rate. As a rule, these increases were lower than the inflation rate.

The specific tax rate for 1000 non-filter cigarettes rose from Hrv 7 (6 November 1999 – 30 June 2000) to Hrv 10 (1 July – 6 December 2000) and then dropped to Hrv 5 from 7 December 2000.

The specific tax rate for 1000 filter cigarettes rose from Hrv 10 (6 November 1999 – 30 June 2003) to Hrv 11.5 (1 July 2003 – 31 December 2006), Hrv 12 (1 January 2007 – 30 June 2007) and finally Hrv 13 (1 July 2007 – 31 December 2007).

From 1 January 2004, the combined tobacco taxation system (specific and ad valorem) came into effect. The ad valorem excise rate (5% of the product sales turnover) was added to the existing specific excise rates. However, at the same time the Pension fund payment, which was an additional excise tax, was abolished.

The Pension Fund payment of 5% of the wholesale price of tobacco products was introduced on 19 July 1999. In May 2001, it was replaced by a specific tax of Hrv 2.5 per 1000 filter cigarettes and Hrv 1.5 per 1000 non-filter cigarettes, before being cancelled on 1 January 2004.

The ad valorem tax rate in 2004 was 5% of sales turnover, or no less than one third of the specific rate (Hrv 3.8 per 1000 filter cigarettes and Hrv 1.7 per 1000 non-filter cigarettes). From 1 January 2005, it was increased to 7% or no less than 40% of the specific rate (Hrv 4.6 per 1000 filter cigarettes and Hrv 2 per 1000 non-filter cigarettes). From 1 May 2005 to 31 December 2006, ad valorem tax was 8% and a new rule was introduced that the total excise tax (specific and ad valorem) could not be less than 22% of the maximum retail price (without VAT and excise duty).

On 1 January 2007 the ad valorem tax rate was increased to 9%, and from 1 July to 31 December 2007 it was 10%.

However, much depends on what price is used to calculate that percentage. According to the State Tax Administration Order 111 of 2001 On Adopting the Rules of Excise Duty Calculation, Terms of Payment and Presenting Calculation Results, the so-called taxable turnover is used for tax calculation. Taxable turnover is equal to the maximum retail price minus excise duty and VAT in the maximum retail price.

This practice diminishes the taxable base for the ad valorem taxation. For example, in 2007 the taxable turnover on cigarettes with a maximum retail price of Hrv 1.05 per pack was only Hrv 0.56. In the EU and the Russian Federation, the ad valorem tax is based on the maximum retail price, which is not reduced by excise duty and VAT.

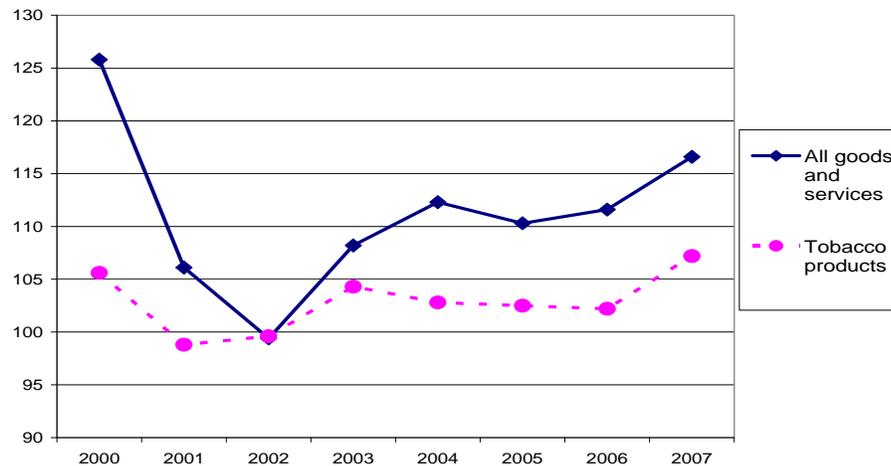
In order to increase the tax burden on expensive cigarettes, the above-mentioned rule was introduced, stating that the amount of the excise tax may not be less than a certain percentage of the maximum retail price (minus VAT and excise). In 2007 this percentage gradually increased from 22% to 24%, but in late 2007 this rule increased the tax burden only on cigarettes with a maximum retail price higher than Hrv 2.75.

While the policy of stabilizing the tobacco tax helped to perpetuate some of the trends visible in the previous phase (increasing state revenue, decreasing proportion of non-filter cigarettes and decreasing cigarette-smuggling into the country), it produced some negative trends.

1. *Decline in the real price.* According to the State Committee for Statistics, the general CPI grew by 131% in 1999–2007, whereas the CPI for tobacco products only grew by 25% (Fig. 7). In reality, the actual decline in the price was even more significant due to the fall in the proportion of cheap non-filter cigarettes in total tobacco consumption. The nominal price per pack of 20 cigarettes grew by 19% from Hrv 2.11 in December 2001 to Hrv 2.52 in December 2006. During the same period, the total CPI grew by 74%. If the prices for filter cigarettes were growing from 2001 to 2007 at the same pace as the prices for other goods, the average price for a pack of filter cigarettes in December 2007 should have been Hrv 3.67. In reality, it was cheaper by Hrv 1.15. The situation regarding non-filter cigarettes was even more paradoxical: the nominal price for a pack of non-filter cigarettes in December 1999 was Hrv 0.92 and in December 2007 Hrv 0.80 so that, instead of growing by Hrv 1.2 (counting the inflation rate), it decreased by Hrv 0.12.
2. *Increase in cigarette-smuggling out of Ukraine.* Low excise taxes on cigarettes in Ukraine create incentives for the illegal export of cigarettes, which are sold legally in Ukraine and have a Ukrainian excise label, to other countries. According to the experts from the Association of the Unions of Wholesale Traders and Producers of Alcohol and Tobacco (40), approximately 5 billion cigarettes were illegally exported from Ukraine in 2000. In 2005, the estimated amount of smuggled cigarettes grew to 32 billion (see section on Smuggling above).
3. *Decrease in the proportion of tobacco excise taxes in the total national tax revenues.* In 1999, the revenues from the excise taxes on tobacco products were approximately 4% of the total revenues to the state budget. In 2007 this proportion fell more than two-fold to 1.6% (Fig. 7). The national revenues from tobacco excise increased from Hrv 2.1 billion in

2006 to Hrv 2.5 billion in 2007, or by 19%. About half of the growth was, however, caused by an increase in the number of taxable cigarettes from 116 to 123.5 billion, and it resulted in increasing tobacco consumption and/or more cigarette-smuggling to EU countries. In 2007, the inflation rate in Ukraine was 16.6%, so the additional revenue from the tax rate increase was purely nominal as the actual revenues fell because of inflation.

Fig. 7. Consumer price index (%), Ukraine, January–December, 2000–2007



### ***Problems with taxation of tobacco products***

Although increasing the national revenues is traditionally viewed as the main, if not the only goal of tax policy, there are three other serious challenges facing the policy for taxation of tobacco products in Ukraine:

- the requirement to promote a reduction in tobacco consumption, as laid down in the FCTC and current national legislation;
- the need, following the declaration of integration into the EU, to comply with EU requirements regarding the taxation of tobacco products and elimination of incentives for smuggling cigarettes to EU countries;
- the coordination of tax policy with non-EU neighbouring countries (Belarus, the Republic of Moldova and the Russian Federation).

### **FCTC and current national legislation**

Article 6 of the FCTC requires the adoption of measures, which include the implementation of tax and price policies on tobacco products, so as to contribute to health objectives aiming at reducing tobacco consumption. Taxation can only bring about a decrease in tobacco consumption if new and higher prices on tobacco products exceed the inflation rate. Since 1999, almost no tax increases for tobacco products in Ukraine have exceeded the inflation rate. That is why the actual prices (taking into account the inflation rate) on cigarettes have been falling, while the prevalence of smoking has been growing (see Fig. 5).

According to the tobacco control law, the Cabinet is to work out proposals to improve tax and financial policies in order to prevent the spread of smoking and other types of tobacco consumption and to reduce its negative impact on public health (Article 6). The Ministry of Health is to participate in the work on such proposals (Article 7). Unfortunately, no such proposals have been made since the approval of this Law.

### **Integration into the EU**

Tobacco taxation policy in the EU is set by Directives 92/79, 95/59 and 2002/10. The main features of the policy are the following:

- each member state shall apply an overall minimum excise duty (specific duty plus ad valorem duty excluding VAT), the incidence of which shall be set at 57% of the retail selling price (inclusive of all taxes) or at 70% (including VAT);
- this overall minimum excise duty shall not be less than €64 per 1000 cigarettes of the price category most in demand.

The main differences in excise duty on tobacco products between the EU and Ukraine are: (i) excise duty in Ukraine is currently 13–34% of the maximum retail cigarette price, which is 2–4 times lower than in the EU; (ii) the value of the excise rate for cigarettes within the average price range (Hrv 2.4 per pack) is only €0.056 per pack, while the minimum value in the EU is equal to €1.28 per pack. This means that in order to reach the EU level, the excise rate in Ukraine should be raised by 23 times.

Several technical differences also exist. The basis for the ad valorem tax in Ukraine is the taxable turnover while in the EU it is the maximum retail price, and non-filter and filter cigarettes attract different rates in Ukraine while in the EU they are the same.

### **Coordination of taxation policy with non-EU neighbouring countries**

In the Russian Federation, the tax rates in 2007 for 1000 filter cigarettes were 100 Rub + 5% of the maximum retail price, but not less than 115 Rub (for 1000 non-filter cigarettes the rates were 45 Rub + 5% but not less than 60 Rub). According to the law approved by Parliament, the minimum rates will increase two-fold by 2010 to 210 Rub and 115 Rub, respectively. Specific tax rates will increase to 175 and 90 Rub, respectively, and the ad valorem rate will go up to 6.5%.

In 2007, the excise rate for a pack of cigarettes that cost Hrv 2.4 in Ukraine was equal to Hrv 0.52 in the Russian Federation as against only Hrv 0.42 in Ukraine. In the Russian Federation, the excise rate for a pack of non-filter cigarettes that cost Hrv 0.8 is Hrv 0.24, and in Ukraine it was Hrv 0.15. Thus, the current tax policy encourages the smuggling of cigarettes not from the Russian Federation to Ukraine, but in the opposite direction.

In Belarus, the excise rates for cigarettes in 2008 are from 111 Rub to 155 Rub per pack of 20 cigarettes, corresponding to Hrv 0.26–0.36. In Ukraine, the excise rate on a pack of cigarettes varies from Hrv 0.17 to Hrv 1.13, so there are no big incentives to smuggle cheap cigarettes. Where expensive cigarettes are concerned, the other components of the retail price play a more significant role than the tax rate. Thus, the current level of smuggling between Ukraine and Belarus is very low.

In the Republic of Moldova, the excise rate in 2008 is 6 MDL (=Hrv 2.6) per 1000 cigarettes plus 3% of the maximum retail price. In 2007, this rate was 6.5 MDL for 1000 cigarettes plus 3%, but not less than 8.7 MDL (=Hrv 3.8) for 1000 cigarettes. This is significantly lower than in Ukraine, which is why there is some smuggling of Moldavian cigarettes into Ukraine.

For a long time, the most popular argument against an increase in the tobacco excise tax in Ukraine has been the fear of cigarette-smuggling from the Russian Federation and the Republic of Moldova. However, the main problem at present is the smuggling of cigarettes out of rather than into Ukraine. It is estimated that approximately 30–35 billion cigarettes (every fourth cigarette produced in Ukraine) are illegally exported annually from Ukraine to the countries of the EU. The enormous level of smuggling from Ukraine, along with the increase in domestic cigarette consumption, was the main reason why cigarette production in Ukraine doubled in 2000–2007. Those who believe that Ukrainian revenue benefits when taxes on cigarettes are paid in Ukraine but the cigarettes are consumed in, for example, Poland, are wrong. In Poland, where smuggling from Ukraine is high, in 2007 the government received Zł 13.5 billion (=Hrv 25 billion) tobacco excise tax revenues from 70 billion cigarettes as opposed to Hrv 2.5 billion in Ukraine from 125 billion cigarettes. This means that Ukrainian revenues were 10 times lower in absolute terms or 18 times lower per cigarette owing to the low tax rates.

### **Tobacco taxation in 2008**

At the end of 2007, the national budget for 2008 was approved together with the bill on amendments to some legislative acts. One of these amendments was to change the system of tobacco product taxation, namely:

- the specific excise rate for non-filter cigarettes was increased from Hrv 13 to Hrv 14 per 1000 items, whereas it did not change for non-filter cigarettes (Hrv 5 for 1000 items);
- the ad valorem rate (in percentage of the turnover from product sales) increased from 10% to 12.5% on all types of cigarette;
- the specific minimum excise tax obligation was introduced, which may not be lower than Hrv 8 per 1000 non-filter cigarettes and Hrv 18 per 1000 filter cigarettes; this will replace the current regulation which states that full excise (specific and ad valorem) may not be lower than 24% of the maximum retail price (without VAT and excise).

Excise tax rates in Ukraine in early 2008 are given in Table 25.

An analysis of the proposed tax rates from the standpoint of meeting the challenges in taxing tobacco products revealed the following.

The specific rate for non-filter cigarettes rose by Hrv 0.02 per pack, or 7%.

The specific minimum excise tax obligation only increases the excise duty on filter cigarettes costing under Hrv 1.2 per pack and for non-filter cigarettes costing under Hrv 0.8 per pack, i.e. for a rather small proportion of cigarettes on sale and only by Hrv 0.015 per pack at the most.

The ad valorem rates are increasing but, as the calculations reveal, only for cigarettes costing less than Hrv 3.35 per pack and only by Hrv 0.04 per pack at the most, or 20% on average. On the

other hand, the ad valorem tax rate for expensive cigarettes is reduced. For example, for cigarettes costing Hrv 7 per pack it has gone down by Hrv 0.25 per pack, or 29%.

The total excise duty has gone up only on cigarettes costing less than Hrv 3.65 per pack. For non-filter cigarettes the average increase is 7% and for cheap filter cigarettes it is 10–13%. For cigarettes costing more than Hrv 3.65 per pack, the total excise duty is decreased: for example, for cigarettes costing Hrv 7 per pack, it has gone down by Hrv 0.23 per pack, or 20%.

### **Impact on tobacco consumption**

The inflation rate in 2007 was 16.6%, so the inflation-adjusted excise tax rate for filter cigarettes was reduced by 4–37% and for non-filter cigarettes by 10%. The real excise duty is thus actually reduced and there are no grounds to expect an increase in the real (inflation-adjusted) prices, so the health objectives of reducing tobacco consumption will not be met.

### **Integration into the EU**

The minimum excise tax on 1000 filter and non-filter cigarettes is only €2.4 and €1.1, respectively, and for medium price cigarettes €3.2. EU Directive 2002/10 requires the minimum excise tax per 1000 cigarettes to be €64, meaning that the Ukrainian tax is much lower than the European tax.

### **Comparison with excise rates in the Russian Federation**

In 2008, the minimum excise rate in the Russian Federation per 1000 filter cigarettes is 142 Rub (Hrv 28) and in Ukraine it is Hrv 18. Consequently, the tax rate per pack will be higher in the Russian Federation by Hrv 0.2. The excise duty per pack of medium price filter cigarettes (Hrv 2.4 = 12 Rub) in the Russian Federation is higher by Hrv 0.14 per pack. Taking into account that VAT in the Russian Federation is 18% and in Ukraine it is 20%, the tax burden (excise + VAT) for such a pack in Ukraine is Hrv 0.11 lower. The situation with non-filter cigarettes is similar: the tax rate per pack of Hrv 0.8 (= 4 Rub) in 2008 will be higher in the Russian Federation by 0.13 Hrv (or by Hrv 0.11 taking VAT into account). In the Russian Federation retail cigarette prices are higher than in Ukraine: for example, the maximum retail price of a pack of Bond cigarettes is 15.5 Rub (=Hrv 3.1), while in Ukraine the maximum retail price for Bond (the most popular brand in Ukraine) is Hrv 2.3. Such differences in prices and tax rates create incentives for smuggling Ukrainian cigarettes to the Russian Federation.

### **The revenues**

If in 2008 the number of taxable cigarettes (production – export + import) is the same as in 2007 (114 billion filter cigarettes and 10 billion non-filter cigarettes), the calculations show that government revenues will reach Hrv 2.8 billion – 11% more than in 2007. This means that the real (inflation-adjusted) revenue most probably will not increase.

### **Flaws in the new tobacco taxation circuit**

The changes to the excise rates adopted for 2008 do not provide a response to any of the main challenges facing tobacco taxation. The tax policy does not promote the public health objectives of reducing tobacco consumption. The process of European integration is slowed down. The excise rates in the Russian Federation are higher than in Ukraine, and the difference between the

tax rates is growing. The tax burden has increased on cheap cigarettes and decreased on expensive cigarettes.

### ***General recommendations for changes to the tax system***

The new system of taxation adopted at the end of 2007 does not solve any of the serious problems with taxation of tobacco products. It should be promoting a reduction in tobacco consumption, promoting European integration and setting the excise duty not lower than that in the Russian Federation. Solving all these problems will guarantee a significant growth in government revenues.

The current excise rates for tobacco products are very low and should be increased as soon as possible, then raised annually to a level higher than the current inflation rate. The annual increases should meet the requirements of the relevant EU Directives.

The calculations necessary to determine the optimum rate of excise tax should take into account, in order of priority, the public health goals (reducing the level of smoking), government revenues and prevention of cigarette-smuggling both into and out of the country.

## **Development of smoke-free policies**

### ***Smoking ban as fire safety policy***

In the former Soviet Union, smoking was forbidden on public transport and in cinemas and some other establishments and premises, mainly as a fire precaution.

Limits on smoking with the purpose of fire prevention still play an important role in the protection of premises against tobacco smoke. By order of the Ministry of Emergencies No. 126 of 19 October 2004 on implementation of the Law on Fire Safety, the Rules of Fire Safety in Ukraine were adopted which, in item 4.1.21, introduced a total ban on smoking on the premises of preschool, school and medical establishments for children.

On the premises of establishments where smoking is allowed, the administration is obliged to establish and equip special places for smoking, mark them by a sign, and supply an urn or ashtray made of non-combustible materials.

In instructions on fire safety for general establishments, basic provisions on fire safety should be set including the acceptability of smoking places, thus smoking places are not obligatory under the fire safety rules.

### ***Prohibition of smoking as a health protection policy***

The first official smoke-free policy for the sake of health protection was proclaimed in 2001 in the Concept of the National Policy on Tobacco Control Implementation. The aim of the Concept was to protect human health by reducing the rates of active and passive tobacco-smoking; one of its basic objectives was the protection of nonsmokers, especially vulnerable people such as children, young people, pregnant women and disabled and elderly individuals.

In March 2002, the Law on the State Regulation of Production and Turnover of Alcohol and Tobacco Products was amended. The need for action to protect the rights of those who do not smoke to live in a smoke-free environment was set out. Article 15–2 was added to the law, concerning restrictions on the use of tobacco products. This Article bans the use of tobacco products, except in special smoking places:

- in health care, culture and educational establishments;
- on public transport (including international transport);
- in enclosed sports buildings;
- in elevators and telephone boxes;
- in children’s playgrounds;
- on the premises of public authorities, local government bodies and other governmental establishments.

This Article also provided local government authorities with the right to establish smoke-free areas within their areas of responsibility.

The legislation did not, however, lay down measures to enforce the implementation of the provisions of Article 15–2, so it was only through the goodwill of some heads of governmental and local authorities, some establishments and organizations that the smoking restrictions were implemented. For example, on 3 August 2001, smoking was forbidden in the building housing the President’s Administration.

A basic objective of the tobacco control law is “to provide protection to people from harmful exposure to tobacco smoke in workplaces and public places”. Unlike previous acts, this Law laid down the need for protection from exposure to tobacco smoke for everybody, not just non-smokers. It included the following provisions:

- the definitions of terms such as smoking of tobacco products, public place, and workplace (Article 1);
- permission for local authorities to establish smoke-free areas (Article 9);
- bans on the smoking of tobacco products in work- and public places apart from in specially designated places;
- the specifying of requirements for the specially designated smoking places to include: (i) ventilation equipment or other facilities for eliminating tobacco-smoke; (ii) visible information about the location of such places; (iii) visible information on the harm of tobacco-smoking for human health;
- the stipulation that at least 50% (not less than 50% but up to 100%) of the area of public places should be designated for persons who do not smoke, situated such that tobacco smoke does not penetrate it;
- the amendment, by Article 175–1 “Smoking of tobacco products in the forbidden places”, of the national code for administrative offences: the Article states that a person who smokes tobacco products in places where it is forbidden by law and in places established as smoke-free by local authorities can be warned or fined from Hrv 17 to Hrv 119 (US\$ 3.4–24).

According to the Ministry of Internal Affairs, 14 400 administrative protocols concerning Article 175–1 were drawn up in 2006. During nine months in 2007, 39 100 such protocols were drawn up, including 10 100 in the Khmelnytskyi region, 6100 in the Kherson region, 3800 in Kiev city, 3500 in the Crimea Autonomous Republic, 1700 in the Lviv region and 1700 in the Sumy region.

The general opinion is that the smoke-free regulations are very poorly enforced, although some observations confirm the trend towards at least a partial smoking ban in many work- and public places.

### ***Smoking ban on public transport***

The rules of providing public transport services, adopted by the Decision of the Cabinet of Ministers of Ukraine No. 176 of 18 February 1997, stipulate the following:

- Item 22: a “no smoking” notice should be placed within a bus.
- Item 30: passengers are forbidden to smoke inside buses.
- Item 34: bus drivers are forbidden to smoke when their buses are moving.
- Item 43: taxi drivers are forbidden to smoke when their vehicles are moving.

A person violating the smoking ban in public transport vehicles can be fined under the Code of Ukraine on administrative offences Article 110 (railway transport), Article 115 (sea transport), Article 117 (river transport), and Article 119 (buses, trams and trolleybuses).

According to reports in the media, public transport drivers in some regions (Lviv, Kharkiv) have been punished for smoking.

Since 2001, smoking has been banned on the Ukrainian International Airlines, and subsequently on other Ukrainian airlines.

### ***Smoking ban in educational institutions***

On 12 December 2001, the Ministry of Education and Science issued Order No. 57 on the prohibition of smoking in educational establishments and establishments of the Ministry of Education and Science of Ukraine, with the purpose of preventing tobacco dependence among children and young people and protecting people’s health and their right to live in a smoke-free environment. Under this Order, smoking on the premises and land belonging to educational establishments and establishments of the Ministry of Education and Science was forbidden.

This order was supported by the Order of the Ministry of Education and Science No. 612 of 10 September 2003 on promoting healthy lifestyles for children and young people and prohibition of smoking in educational establishments and establishments of the Ministry of Education and Science of Ukraine.

The requirements laid down in these orders were implemented in the orders of regional educational departments, for example, in the order No. 196 of the Education and Science Department of Kiev municipal state administration of 16 July 2003 on the prohibition of tobacco-smoking in pedagogical educational establishments within the area of Kiev city, and in orders of the separate educational establishments.

### ***Smoking ban in catering establishments***

By Order No. 170 of the Ministry of Economics of 17 May 2006, the rules for restaurants and cafés were amended by Item 3.10 with the following: “The smoking of tobacco products on the service premises of restaurants and cafés (regardless of type and class) is banned, except for in specially designated places. The owner is obliged to establish special places for smoking with ventilation equipment or other facilities for eliminating tobacco-smoke and to place visible information for consumers about the location of such places and about the harm of tobacco-smoking for human health”.

### ***Smoking bans in some cities and towns***

The tobacco control law empowered local authorities in the area of tobacco control, in particular to establish smoke-free areas. This right has been used by some regional centres, which already have effective experience:

On 16 June 2005, Cherkassy city council adopted a list of smoke-free public places (decision No. 8–199). Similar decisions have been adopted in Lutsk (No. 5/136 of 8 September 2006), Kherson (No. 434 of 19 September 2006) and Kmelnitskiy (No. 27 of 6 December 2006), as well as other towns (Donetsk, Ivano-Frankivsk, Kirovograd, Lugansk, Sevastopol, Sarny, Uzhgorod), and drafts are being prepared for consideration at local council sessions in, for example, Mykolaiv and Sumy.

In some of the cities where local authorities have established smoke-free areas, there is a problem with enforcement. In Cherkassy the media are sometimes called to witness the fining of violators. This not only ensures real control over the implementation of local council decisions, but is also a good way to inform the population about smoking bans in public places.

The decisions of city councils to ban smoking in public places give powers not only to the police to draw up reports on administrative violations for smoking in public places (as defined in national legislation), but also to local authorities and services. This makes enforcement considerably more efficient. The police used to delegate their power to report on administrative violations for smoking in forbidden places to local inspectors, who are rather busy and in many cases do not enforce smoke-free legislation.

There are no penalties in the national legislation for the owners of businesses who allow smoking on their premises. As a result, the owners of most bars and restaurants allow smoking, despite the ban. At local level, the problem can be solved by involving the council’s trade department, which gives annual or extended licences for the business to deliver meals. Withholding such licences is the most effective way to enforce the smoking ban in restaurants. This already happens in Cherkassy.

A draft of a model decree for local authorities on the regulation of tobacco-smoking within their administrative areas, based on the relevant resolutions of councils already adopted in cities, is in Annex 3.

### ***The FCTC and protection from exposure to tobacco smoke***

Article 8 of the FCTC, “Protection from exposure to tobacco smoke”, is based on scientific evidence which has unequivocally established that exposure to tobacco smoke causes death, disease and disability. Each Party should adopt and implement effective legislative, executive, administrative and/or other measures to provide for protection from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and, as appropriate, other public places.

The Second Conference of the Parties to the WHO Framework Convention on Tobacco Control (Bangkok, July 2007) adopted the guidelines for implementation of Article 8.

### ***Conclusions and recommendations***

While some smoking restrictions have been adopted by national and local authorities, their enforcement is rather poor. Experience in Cherkassy has shown that this can be much improved.

For proper public protection from exposure to tobacco smoke, some amendments to current Ukrainian legislation are needed, based on the FCTC guidelines:

- As there is no safe level of exposure to tobacco smoke, a totally smoke-free environment should be introduced in work- and public places. The designation of separate spaces for smoking (even when equipped with separate ventilation) may only be allowed as an exception and cannot constitute workplaces, even in catering establishments such as bars and restaurants, because they are the workplaces of bar and waiting staff.
- The legislation on protection from exposure to tobacco smoke should cover all work- and public places and all types of public transport.
- Clearer definitions of such terms as “smoking”, “public place” and “workplace” are needed.
- The legislation should identify the authority or authorities responsible for enforcement, and should include a system both for monitoring compliance and for prosecuting violators.
- The legislation should specify penalties for violations, sufficient to act as a deterrent. Larger penalties are required to deter business violators than to deter violations by individual smokers.
- Some government resources are needed for public education and enforcement of the legislation.

## **Development of policy for the packaging and labelling of tobacco products**

### ***Health warnings***

Cigarette packs are supposed to carry a health warning. In the 1990s there were no direct requirements regarding the text, size and colours of the warnings. Cigarettes packs sold legally in Ukraine carried such health warnings as: “The Ministry of Health warns: smoking is dangerous to your health”, “Smoking is dangerous to your health”, “Smoking is dangerous to health”, and “Smoking makes life shorter”. The warning was printed on one side of the pack in small letters

1 × 1 mm or 2 × 2 mm, sometimes in contrasting colours (black and white), sometimes not (gold on red).

Legislation in 2002 introduced some requirements regarding the health warnings:

- the minimum size of the warning should be 10% of front and back main sides of the pack;
- the text should always read: “The Ministry of Health warns: smoking harms health”;
- the warning should be printed in such a way that it could not be damaged, covered by excise stamps or removed;
- information on the tar and nicotine content should cover at least 10% of one of the second largest sides.

There were no requirements regarding the text and background colours, so warnings were sometimes barely visible.

Article 12 of the tobacco control law introduced new health warnings, effective from 1 January 2007, with the following main features:

- the general health warning must be placed on one principal surface of the packaging of tobacco products (packs and cartons);
- the other principal surface of the packaging must carry one of six additional health warnings;
- the texts of the general and additional health warnings must be clear, surrounded by a black border no less than three millimeters in width and printed in a black bold font against a white background;
- the general and additional health warnings must cover no less than 30% of the area of the external surface of every greater side of the packaging of tobacco products;
- information on nicotine and tar yields must be placed on the external surface of one of the second largest sides of the packaging of tobacco products and must cover no less than 15% of this side area.

### ***Misleading terms***

The tobacco control law prohibited, as from 1 January 2007, the production (except for export) and import for sale in Ukraine of tobacco products bearing terms, descriptors, trade marks, images, symbols or any other signs that could mislead or create an erroneous impression about the characteristics and effects on health, or directly or indirectly give the false impression that a particular tobacco product is less harmful than other tobacco products, including such terms as “low tar”, “light”, “ultra-light” and their equivalents in other languages.

Cigarette packs in Ukraine no longer bear words such as “lights”. However, the manufacturers just changed the words on certain brands; for example, “lights” are now called “blue”. The design of most brands remains the same and it is easy to distinguish “light” varieties just by colour. Some new terms are supported by a figure showing the International Organization for Standardization (ISO) tar level. These features can be expected to weaken the ban on misleading terms.

### ***Inserts in tobacco packs and other requirements***

The tobacco control law introduced a total ban on inserts to tobacco packs, except those approved by legislation. In February 2006, however, this provision was replaced by a ban only on “those inserts which have terms, descriptors, symbols or any other signs that can mislead or create an erroneous impression about tobacco products...”.

The amendments adopted in 2004 require that the maximum retail price and date of production should be printed on all packaging of tobacco products.

### ***FCTC provisions on packaging and labelling***

Current legislation met all formal requirements of Article 11 of the FCTC on the packaging and labelling of tobacco products, albeit at the minimum possible levels (41):

- health warnings are approved by the competent national authority; in Ukraine this authority is Parliament, which means that only Parliament can change the texts and other features of the warnings;
- Ukrainian law stipulates that “Every variant of the additional health warning texts is placed by the producer of the tobacco products on the packaging of tobacco products one after another”, but there are no rules for rotation and no obligation to rotate warnings in the future;
- a black frame is included in the size of the health warning.

All packaging contains information on emissions of tobacco products as defined by the national authorities, but these are just tar and nicotine levels measured by the ISO method, and from these figures smokers still get erroneous impressions of the health effects, hazards or emissions. In 2007, the tar and nicotine figures became much more visible than before on most packaging.

### ***Public attitude to packaging and labelling regulations***

According to the national survey on tobacco control conducted in 2005 (15), a large majority of the population (86%) believes that it is necessary to place detailed information on tobacco packaging about the impact of smoking on health.

A national survey conducted in 2004 (14) explored the public attitude towards the size of the health warnings. Warnings taking up 30% of the pack surface (the current practice) were supported by 34.6% of respondents, with 28.3% against. Warnings taking up 50% of the pack surface were supported by 50% of respondents, with 20.5% against. So the bigger the warning, the greater the public support.

### ***Conclusions and recommendations***

While all requirements of the FCTC on packaging and labelling are formally met, tobacco consumers are still poorly informed or even misinformed about the dangers caused by tobacco products.

The following amendments are proposed in order to improve the provision of information to consumers of tobacco products:

- the introduction of pictorial health warnings in line with examples from the EU, Canada, Thailand and other countries;
- an increase in the size of health warnings to 50%, excluding the frame;
- an increase in the number of health warnings to at least 10;
- the introduction of clear rules on the rotation of health warnings;
- a ban on inserts in tobacco packaging, except those containing health information designed and approved by the health authorities;
- a ban on the placing of quantitative information on emissions of tobacco products, an increase in the number of harmful substances which are listed on the packaging and an increase in the size of the surface devoted to this information to 100% of one of the second largest sides of the packaging;
- a ban on the printing on the tobacco packaging of any information (telephone numbers, web-sites, e-mails, information about sales to minors, etc.) which is not approved by the Ministry of Health.

The proposed amendments are in line not only with the letter but the spirit of the FCTC.

## **Other tobacco control regulations**

### ***Regulation of the content and disclosure of tobacco products***

The Ministry of Health issued an order in July 1997 that set a maximum permissible level for the tar and nicotine contents of cigarette smoke. The tar content of filter cigarettes sold in Ukraine should not exceed 15 mg per cigarette. Non-filter cigarettes are allowed a maximum of 22 mg tar per cigarette. The nicotine content limits are 1.3 mg and 1.5 mg, respectively. Later the same levels were adopted by the law on state regulation of alcohol and tobacco production.

Article 10 of the 2005 tobacco control law adopted unified limits for all kinds of cigarettes: 12 mg of tar and 1.2 mg of nicotine. Although these limits will only be enforced from January 2009, almost all filter cigarettes already meet them.

Article 11 of this law states that the Ministry of Health carries out control of enforcement of not only the nicotine and tar yields stipulated by the law, but also the yields of other substances and ingredients in tobacco products harmful to human health.

A producer or importer of tobacco products is obliged to provide the Ministry of Health with information on the yields of substances harmful to human health – nicotine, tar, other harmful substances and ingredients that are present in tobacco products and their emissions.

The Ministry of Health should define (Article 7) and publish annually (Article 11) lists of substances and ingredients considered harmful to human health present in tobacco products and in their emissions, and should also inform the population through the media about the harmful substances and ingredients in tobacco products which are present in both the products and their emissions, and about the harm to human health of using tobacco products.

Currently the list of harmful substances is being drawn up by the Ministry of Health Institute of Ecohygiene and Toxicology, taking into account European Commission suggestions on the issue.

The legislative provisions are in line with the Articles 9 and 10 of the FCTC, although they need to be properly enforced.

### ***Restrictions on sales***

According to national legislation, the sale of tobacco products and other goods related to tobacco use is banned to and by persons aged under 18 years.

The sale of tobacco products is also prohibited:

- on the premises and property of education and health institutions
- in shops (or departments of shops) which sell goods for children and sport
- in sports venues
- in other places defined by local authorities
- through vending machines
- in self-service shops (except cartons)
- by piece (except cigars)
- without a licence.

It is also forbidden to sell goods for children which imitate tobacco products.

The punishment for violation of these regulations is defined by Article 156 of the code on administrative offences and ranges from Hrv 51 to Hrv 1700 with confiscation of the products for sale.

Enforcement of some sales regulations (especially concerning sales to minors and sales without a licence) is very poor. In cities and towns street vendors almost openly sell cigarettes, including smuggled ones. The police sometimes arrest them, but since some vendors sell cigarettes illegally on the same sites for years, the police are well aware of this illegal business and do not make enough effort against them. According to the Ministry of Internal Affairs, in 2006 as many as 5100 administrative reports on Article 156 were drawn up, on average less than one report per day per region. In nine months in 2007, 6200 such reports were drawn up (591 in Mykolaiv region, 414 in Kherson region, 477 in Donetsk region and 558 in Odessa region).

### ***Conclusions and recommendations***

The disclosure of harmful substances in tobacco products and in their emissions has some potential for reducing tobacco-smoking, but current legislative provisions on disclosure need to be implemented as soon as possible. The disclosure list should not just mention harmful substances but also provide clear information on the specific harm of each substance to human health.

The unlicensed sale of cigarettes is still widespread. The police have all the instruments they need to stop such illegal sales but do not use them proportionately.

## 5. Response to tobacco-related problems

### Health services and health promotion

The Complex Plan adopted in 2005 by the Ministry of Health states in particular:

Current activities of health services on smoking prevention do not correspond to the concurrent challenges. It did not reach the necessary scale, did not become one of the work priorities of the health care departments and institutions. Health professionals do not have an active position on this issue. They do not have any motivation to use the prevention technologies, which unlike medical treatment are not included in the health care protocols; their obligatory minimum is not regulated. Current education does not encourage doctors to provide proper aid to smokers. These activities of medical establishments are not represented in health statistic forms. There is no quality control of activities on the prevention and overcoming of tobacco-smoking.

The Complex Plan includes the following activities:

- to develop and adopt norms for the volume of preventive activities by health professionals and health care institutions at all levels, beginning with primary health care;
- to add indices of tobacco prevention activities when old statistical forms are revised and new ones developed;
- to enhance the role of health centres in the promotion of healthy lifestyles by providing them with assistance and material and human resources.

In 2007, the Institute of Public Health developed a model for the provision of smoking cessation aid in primary care establishments, to be gradually introduced in these establishments.

Various tobacco prevention activities are conducted by regional health centres. For example, in the Zakarpatsky region, in accordance with the Complex Plan, basic efforts have been concentrated on raising awareness among some population groups and in particular risk groups, as well as on the education and training of specialists in smoking prevention issues and the provision of methodical materials for health professionals and teachers. A course of lectures on the method of teaching smoking prevention for young people has been conducted for students at the Zakarpatsky Institute of Postgraduate Pedagogical Education. For “schools for responsible parents”, which operate in health care establishments in the region, a leaflet for women “The best you can do for the children is to protect them from tobacco smoke” has been prepared, printed and disseminated. In Uzhgorod, the city executive committee cooperated with the social services centre for children, family and young people to run activities with the slogan “Good Buy, cigarette!”, distribute awareness materials and interview passers-by with the question: “What do you know about passive smoking?”

In Donetsk region, the health centre conducted 44 regional seminars on training in tobacco-smoking prevention which were attended by 1564 health care, education and social workers as well as representatives of civil organizations. The participants were given a brochure “On the harm of tobacco-smoking: modern approaches”.

In Kiev, the city health centre organized an anti-tobacco club with monthly meetings for all those wishing to stop smoking. In the Podil district of Kiev, a model for help with giving up smoking has been worked out in the specialized surgery for prevention and treatment of tobacco dependence in the central district polyclinic.

On 31 May 2006, the Cabinet of Ministers issued Decree No. 762 amending the “Typical rules of work of health care departments of regional, Sebastopol city and Kiev city state administration”. In accordance with the Decree, the health care departments:

- participate in the implementation of national, regional and other programmes to prevent and reduce the use of tobacco products and their harmful impact on public health;
- ensure the implementation of preventive and medical activities directed towards preventing and reducing the use of tobacco products and their harmful impact on public health;
- together with other relevant bodies in the regional administration, carry out surveillance and monitoring of the use of tobacco products in the region as well as activities aimed at restricting the use of tobacco products among the population and protecting the public from the harmful impact of exposure to tobacco smoke, primarily among children and young people;
- inform the public through the media on the harm to human health caused by the use of tobacco products and the morbidity and mortality caused by the use of tobacco products;
- assist in providing financial resources for treatment and preventive activities to reduce morbidity caused by the use of tobacco products and exposure to tobacco smoke.

## **Aid to stop smoking**

Information regarding help for stopping smoking has been collected from both providers and recipients of that aid.

### ***Reports from health care workers of help to stop smoking***

#### **Reports from the narcological (alcohol and drug treatment) service**

In November 2007, a survey was conducted among chief narcologists of the regions on the provision of help to stop smoking. Information was received from 15 regions and the Autonomous Republic of Crimea. In only one region (Chernivtsy) were there no such services, and in two regions (Chercassy and Ivano-Frankivsk) they were only provided within complex medical treatment of alcoholism. In the Chercassy, Kharkiv, Kherson, Kirovograd, Zakarpatsky and Zhitomir regions, help to stop smoking is only provided in public establishments; in Mykolaiv region only in private establishments; and in the Chernigiv, Dnepropetrovsk, Donetsk, Ivano-Francovsk, Lugansk, Rivne and Ternopil regions and in the Crimea it is available in both public and private health care establishments. In total, help to stop smoking is provided in 66 establishments in 14 regions, 29 of them in the Kharkiv region. A substantial proportion (in some establishments up to 100%) of patients receive such services free.

Specialists such as narcologists, neurologists, psychologists, psychotherapists and general practitioners provide help with stopping smoking. They use methods as varied as

pharmacotherapy, phytotherapy, nicotine replacement therapy, aversion therapy, acupuncture, laser therapy, psychotherapy, psychological correction, auto-training and hypnotherapy. Information about the efficacy of medical treatment was only available from city polyclinic No. 5 in Dnepropetrovsk city, where supervision had been stopped for about 37% of patients who had managed to give up smoking for good.

Within the range of medical services available, help with stopping smoking is a small part, usually between 1% and 10%. Only in one establishment in the Donetsk region is the rate higher, at 30%. Information on the number of patients who had received help to stop smoking was only available for 12 regions. In 11 of them this aid was provided to a little over 4000 people. Since more than 20 million people live in these 11 regions and at least 5 million of them are smokers, fewer than 1 in 1000 smokers had received such help.

The services to help with stopping smoking are most developed in the Kharkiv region, where in 2006 such aid was provided to more than 5000 smokers.

### **Surveys of health professionals**

According to surveys of 645 health care workers conducted in Kiev and Lviv (22), 84.8% of physicians reveal the smoking status of their patients and 82.5% typically advise their patients to stop smoking. However, under half of them (44.5%) believe this can be effective.

Nicotine replacement therapy (NRT) is recommended on a regular basis by 9.9% of physicians and sometimes by 12.7%. The authors of the report hypothesize as well that the low prescription rate for NRT maybe due to physicians' misconceptions with regard to nicotine: 78.3% believe it has adverse effects on the cardiovascular system, 27.4% assume it can cause obstructive pulmonary disease, and 47.7% believe nicotine has carcinogenic properties.

In 2003, smoking among health professionals and the degree to which they helped patients to stop smoking was estimated in a sample of 799 Ukrainian general practice physicians in Kiev city and Lugansk and Zhytomyr regions (23). It was found that a large majority of physicians (97.6%) had asked their patients about their tobacco use during the previous month or stated that they knew whether a patient was using tobacco. Fewer than half of the physicians (41.3%) recorded information on tobacco use in their patients' records. Significantly more physicians who never smoked recorded this information than did current and past smokers. The type of advice most frequently given to patients was to explain the risks of using tobacco (78.1%), and the next most frequent was advice on stopping (23.5%). Fewer physicians gave out materials (13.5%), and few offered referrals to special clinics for stopping smoking (10.3%) or prescribed NRT (9.9%), and only 2.1% set up special appointments for smoking consultation.

The major obstacles to physicians becoming involved in helping patients to stop using tobacco were reported as a lack of time (44.4% of respondents) and the strong belief that counselling is of no value (40.9%). One quarter (24.5%) thought they had not received sufficient education in helping patients to control or stop their use of tobacco. Almost half (48.1%) believed that their efforts to educate patients had little or no effect, but a majority (69.5%) would be willing to help if provided with the tools and resources.

Chaban & Turanskyj (26) surveyed 140 medical students and found that 65% believed that health professionals should be active in advising patients to stop smoking, 15% responded negatively, and 20% believed that smoking was a patient's personal decision.

Stoyka (27) surveyed 620 physicians working in Kiev city. He found that 46.5% of them reported that they asked their patients about their smoking status (although only 38.5% of the patients confirmed this); 17.7% of physicians asked about smoking when they assumed that a patient was a smoker; 13.5% asked about smoking if they considered it to be a factor in complicating the course of disease; 17.1% asked about smoking in cases where smoking could be a causal factor for the disease in question; 5.2% did not ask their patients about smoking at all. Thus 34.4% of patients were not asked about smoking (26.1% of smokers and 40.6% of non-smokers). Only 31.0% of the physicians surveyed documented the smoking status of all their patients in their medical records, 35.0% did so sometimes and 34.0% never did.

Half of the physicians (56.0%) advised all the smokers to stop smoking, 40.0% gave advice in cases where smoking could complicate the course of the disease or the patient was a heavy smoker and 4.0% never recommended the patients to stop smoking. The poor quality of counselling was apparent: only a negligible proportion of the physicians surveyed used the key elements of counselling. Only 1.9% developed a plan, with dates, for the patients to stop smoking, and only 3.1% prescribed NRT. Thus 44.0% of the physicians surveyed did not give the relevant help for their patients to stop smoking.

The physicians surveyed also displayed a low level of tobacco-related knowledge. Half (50.0%) did not know which medicines or methods were available to help patients stop smoking and 62.9% could not name any NRT medication.

An analysis of medical records showed that the outpatient documentation contained only few and intermittent records with regard to smoking: 113 records were found in 1204 outpatient cards, 9.4% of the documents reviewed. The records are somewhat formal and mainly demonstrate that information on the harm of smoking was given to the patient (86.7%). Some recorded the duration of smoking (7.14%) and its intensity (12.4%). Physicians mostly made notes on the patient's record, but none of the cards bore the smoking mark which could serve as a good reminder of the need to give a smoker further advice.

### ***Patients' reports regarding physicians' advice to stop smoking***

Several surveys have included questions aimed at studying the involvement of health care professionals in giving help to stop smoking.

#### **National tobacco use survey, 2005**

The national survey of tobacco use survey in 2005 (15) included questions regarding help to stop smoking.

Among current smokers, 69% reported never having received any intervention from a health professional to stop smoking, 25% said that the doctor had advised them to stop smoking, and only 2% had received assistance from a health professional. The probability of an intervention and its intensity increased with age of smokers. Smokers with higher nicotine dependence receive more intensive interventions than those with a lower level of dependence (Table 29).

Table 29. Interventions by health workers regarding stopping smoking, by level of nicotine dependence, Ukraine

	Nicotine dependence level		
	Low	High	Total
No. of respondents	261	610	871
<i>Has your doctor in any way addressed the smoking issue with you?</i>			
No doctor has ever mentioned the smoking issue	75.5%	66.4%	69.1%
Doctor asked if I smoked but did not recommend that I should stop	4.2%	3.8%	3.9%
Doctor asked and recommended that I should stop smoking	19.9%	27.4%	25.1%
Doctor asked, recommended that I should stop and offered help with stopping smoking	0.4%	2.5%	1.8%

The 2005 survey included a question about the perceived need for help to stop smoking. This question was addressed to all respondents and referred to the respondents themselves or their relatives who needed help to stop smoking. When males and females were compared, it was found that while male and female nonsmokers expressed comparable needs regarding stopping smoking for their relatives (20–21%), among current smokers females expressed a stronger need for such help than males (29% vs. 24%).

Smokers were asked to assess different ways of stopping smoking if they were to consider trying. A clear majority (77%) would rely on willpower. Other methods opted for were NRT (10%), other medicines (10%), specialist advice for stopping smoking (7%), advice from a doctor (6%), self-help literature (2%) and advice from a pharmacist (1%).

Generally, bearing in mind the number of smokers, there is a serious demand for help with stopping smoking.

### Survey of pregnant women, 2003

A survey of pregnant women conducted in Kiev in 2003 involved 698 participants and included questions about interventions by antenatal clinic personnel regarding tobacco, alcohol, coffee and the use of illegal drugs (42). Over two in three women reported that they had been asked about their use of tobacco, more than had been asked about coffee, alcohol and the use of drugs (Table 30). Over half the women reported that they had been given information by health professionals about the effects of tobacco on the foetus.

Table 30. Probability of interventions by antenatal clinic obstetricians regarding coffee, tobacco, alcohol and drugs, Ukraine, 2003

	Health professional	
	asked about use (%)	informed patient about effects (%)
Coffee	48.37	40.87
Tobacco	69.48	51.64
Alcohol	65.73	51.71
Drugs	59.20	48.21

Women who smoked during their pregnancies were more likely to be asked about smoking by their doctors. Specific information regarding smoking-related harm for the foetus was significantly more likely to be given to smokers than to non-smokers.

Information about smoking-related harm was also more likely to be provided when the pregnant woman's partner was a smoker. Smoking by other family members and exposure to environmental tobacco smoke by the pregnant woman were not associated with the likelihood of tobacco-related intervention.

This shows that the majority of pregnant women receive some interventions regarding smoking during antenatal care appointments, and that such interventions are based on prior information about the smoking status of the pregnant woman and her partner.

### Survey of patients with chronic diseases, 2006

In 2006, a group of 68 patients with chronic noncommunicable diseases was surveyed in the Korchuvate polyclinic in Kiev (43). They reported whether they had received advice and helpful information from their physicians about healthier lifestyles. Physicians were more likely to give information about healthy and less healthy behaviour and less likely to give direct advice as to what should be changed in health-related behaviour. With regard to both information and direct advice, physicians were more likely to address diet and physical activity and less likely to touch tobacco and alcohol. Only 57.4% of respondents reported that physicians gave information about the harm of tobacco-smoking, and only 10.6% responded that the physicians had directly advised them to stop smoking – this proportion was higher among those who smoked about 20 cigarettes a day (33%) than those who smoked about 10 cigarettes a day (20%).

### Survey of students, 2007

A survey of Kiev Mohyla Academy students conducted in 2007 included questions regarding physicians' advice about different health-related issues (Table 31).

Table 31. Students advised by doctor to stop smoking, by gender and smoking status, Ukraine, 2007

Currently, do you smoke cigarettes every day, some days or never?	No. of respondents	Advised to stop smoking (%)
<i>Females</i>		
Every day or almost every day	78	7.7
Some days	58	3.4
Not at all	481	0.0
Total	617	1.3
<i>Males</i>		
Every day or almost every day	26	19.2
Some days	35	5.7
Not at all	192	1.6
Total	253	4.0

Students who smoked were more likely to be given advice by their physicians, and the more they smoked, the greater the probability of the intervention. On average, 1.3% of female students and 4.0% of male students reported having been advised to stop smoking. The highest proportion of those being given such advice was among male students smoking daily – 19.2%.

### **Surveys of Quit and Win participants**

Surveys of participants in Quit and Win contests and other antismoking events have shown that only 3.3% of smoking patients are advised by their doctors to take part in antismoking competitions and events, 2.3% were given tobacco-related leaflets, 2.3% were referred to specialists to help them stop smoking, and 6.8% were recommended to use NRT (27).

Among smoking patients, 8.0% took part in the antismoking classes; 38.6% were informed about the antismoking campaigns but only 3.3% took part.

### **Conclusions**

Triangulation of data collected from different sources allows the observation of several common features:

- health professionals are more prepared to discuss diet issues, rest and sleep patterns and physical activities, and less likely to discuss topics related to tobacco and alcohol consumption;
- health professionals are more likely to ask questions about health-related lifestyle issues, somewhat less likely to give information about the harms and benefits of certain lifestyles, but significantly less likely (2–5-fold) to give direct advice and support for changing behaviour;
- older patients and patients with more severe states are more likely to receive a lifestyle intervention from a health professional than those younger and less dependent and affected;
- health professionals who provide smoking-related interventions typically take into account the smoking status of a patient and other personal information such as the smoking status of a partner of a pregnant woman.

### ***Medication to help stop smoking and other interventions***

The leading factor to hinder the successful stopping of tobacco-smoking and provoke a relapse is tobacco dependence. In Chapter 5 (Mental and behavioural disorders) of the International Classification of Diseases (ICD–10), it is classified as a disease under the section on “Mental and behavioural disorders due to psychoactive substance use”, category F17 “Mental and behavioural disorders due to use of tobacco”.

Several manuals and guidelines concerning medical treatment for tobacco dependence have been published in Ukraine (44–48). The most comprehensive international information on the treatment of tobacco dependence is available from the International Union Against Cancer Treatobacco.net database (<http://treatobacco.net>, accessed 24 July 2008) in several languages, including Russian.

Medical treatment of tobacco dependence in Ukraine uses psychotherapy, acupuncture, pharmacotherapy and their combinations. Using the evidence-based approach, the most widespread methods have been evaluated for their efficacy. This revealed that individual conversations with a doctor or a nurse and their personal and repeated recommendations, taking into account the health of the patient, increase the odds of successfully stopping by 69%; behavioural support increases the odds by 71%, self-help materials by 23%, and reflex therapy,

acupuncture, collective listening to lectures by only 2–3%. Just as with other chronic states, a complex approach to medical treatment, including pharmacotherapy, is the most effective.

The first line of medicines recommended by WHO (49) includes five basic forms (chewing-gum, patch, inhalator, tablets, nasal spray) of NRT and the antidepressant bupropion (zyban). The efficacy, safety, reliability and cost-effectiveness of NRT have been demonstrated in long-term prospective studies and through long-term experience of their use in many countries. The efficacy of zyban has also been confirmed by clinical trials but, unlike NRT, it is only available on prescription because of its side effects, which need to be taken into account.

The chewing-gum Nicorette, with 2 and 4 mg of nicotine with the original taste and a mint flavour is officially registered. Its efficacy has been confirmed by many trials conducted in other countries (50–53). According to a survey of 6000 participants in the “Quit and Win” competition, only about 4% of them used Nicorette to help them stop smoking. By comparison, in the Russian Federation 7% used NRT and in Finland up to 40% of the participants did. Most respondents (68%) did not know or did not have enough information about the medical treatment of tobacco dependence. In addition, an epidemiological survey of the population showed that in rural pharmacies this medicine is often unavailable. It was found that doctors can be prejudiced against the medicine which contains nicotine and they lack adequate knowledge of the impact of tobacco smoke on health and methods of helping people to stop smoking.

Another medicine with proved efficacy is Tabex, which contains cytosine that mimics the action of nicotine. As it has been available for many years and is cheaper than NRT, far more smokers use it to stop smoking. International research data concerning its efficacy have recently been made available (54,55).

Pharmacies also offer some other medicines for stopping smoking, such as herbal cigarettes and tea with aversive effect, but there is no evidence regarding their efficacy. Some doctors use other aversive medicines such as mouthwash with solutions of silver nitrate, tannin and other similar methods. In the Cochrane library review, the efficacy of such methods is questioned (52). It has been shown that the effect of such substances weakens considerably after 10–20 minutes, and after the intake of foods or liquids it fully disappears.

Ukrainian narcologists often offer acupuncture to their patients but international research has shown that it is no more effective than a placebo (56). The same applies to hypnotherapy, which cannot be considered effective (57).

Most people who want to stop smoking tobacco do not receive the necessary medical help. Medicines should be made more available in pharmacies and more affordable and doctors should be more willing to prescribe them to patients who can benefit.

### **Estimate of the need and demand for help to stop smoking**

The following estimate is based on the results of the national survey on tobacco in 2005 (15).

In general, 13–15 million Ukrainians smoke daily and 8–13 million (based on different data) are dependent smokers. Some 8.5–10.3 million people have said they want to stop, of whom 3.1–4.4 million believe they need help to do so. More specifically, 0.5–1.7 million are ready to use the help of a doctor or pharmacist.

## **Conclusions and recommendations**

Graduate and postgraduate programmes for health professionals need to pay more attention to issues related to lifestyle interventions. Questions related to tobacco use should be considered obligatory, no matter the presumed patient's smoking status. Health professionals should be taught to address smoking issues no less than questions of diet. Their inadequate knowledge of both tobacco-related harm and relevant behavioural interventions decreases the rates and effectiveness of such interventions. Educational programmes should address skills issues with regard to the offering of brief advice and behavioural support. Health workers' lack of self-confidence in offering health-related advice may be a major obstacle in giving such counselling. Information about approaches to the diagnosis of smoking status and readiness to change may be helpful for those health professionals who lack self-confidence in smoking-related counselling.

Medication for helping smokers to stop should be more available and affordable to patients, and at least partial reimbursement of the cost of such medicines to those patients who stop smoking for good should be considered under the national tobacco control programme. Help to stop smoking provided in health care institutions should only be based on evidence-based methods.

On the basis of these estimates, it is recommended that a step-by-step improvement of services to stop smoking should be planned. As a first step, it may be enough to run services for 0.5–1 million people annually, approximately equivalent to the number of people who are currently cutting down on the number of cigarettes they smoke, with the eventual aim of gradually broadening them to an annual number of 2–5 million.

## **Response of the education system to tobacco-related problems**

### ***Educational and preventive activities***

School programmes such as “The basics of life safety” programme make a primary contribution to the prevention of tobacco use, as they contain some information on the harmful impact on health of tobacco. The integrated course “Basics of health”, which is taught to schoolchildren for one hour a week in the 1st–7th grades, is now included in the basic governmental component of education. According to the typical curricula adopted by Ministry of Education and Science, the 8th–9th classes are taught the “Basics of health” for half an hour each week. Education is delivered through tutorial recommended by the Ministry of education and science of Ukraine (order No. 1/11–6611 of 23 December 2004): “Basics of health. Programme for 5–9 classes of secondary educational establishments”. In this curriculum, the negative impact on health of tobacco-smoking, alcohol, narcotic and toxic substances is considered combined – there are no separate themes on the harm of tobacco-smoking.

Two series of smoking prevention brochures were issued with the support of the United Nations Children's Fund (UNICEF) in 2000 (58) and 2003 (45,59–65).

The people involved in primary tobacco prevention include social workers, teachers, psychologists in the social services for families, children and young people, school teachers/psychologists and others. Secondary prevention is carried out by health professionals, mainly doctors.

Nevertheless, primary and secondary tobacco prevention is not systematic, nor is it carried out correctly. The main causes for this are: (i) inadequate knowledge on the part of specialists about the impact on health of tobacco, (ii) the general orientation of the health care system towards the medical treatment of diseases rather than preventing them, (iii) no proper encouragement for specialists to conduct prevention activities, and (iv) insufficient training in tobacco control.

### ***School-based tobacco prevention programmes***

The following analysis is based on data from the GYTS conducted in Ukraine in 1999 and 2004. Four questions in the questionnaire relating to school prevention programmes are shown in Table 32. From their answers to these questions, it appeared that the percentage of teenagers who had heard about the dangers of smoking during the previous academic year was extremely high compared to other east European countries and countries of the former Soviet Union which took part in the GYTS. Only Slovakia had a higher percentage of positive answers to the question.

Table 32. GYTS participants' answers to the questions on school prevention programmes, Ukraine, 1999 and 2004

Survey year	1999	2004
Sample size	4017	7532
During the previous school year, were you taught in any of your classes about the dangers of smoking? (percentage answering yes)	62.2%	85.2%
During this school year, have you discussed in any of your classes the reasons why people your age smoke? (percentage answering yes)	44.9%	80.6%
During this school year, have you been taught in any of your classes about the effects of smoking such as yellow teeth? (percentage answering yes)	53.5%	88.1%
How long is it since you last discussed smoking and health as part of a lesson?		
Never	28.4%	13.9%
During the previous year	53.6%	73.4%
Over a year ago	18.0%	12.7%

These results about the high coverage of tobacco-related classes in school lead to questions about the effectiveness of school-based prevention interventions.

The association between reported school-based interventions and smoking behaviour outcomes was explored through logistic regression analysis controlling for year of the survey, age and gender of the respondent, smoking in the family and in the class and different characteristics of attitudes towards smoking tobacco.

The risk of recently starting to smoke was assessed as the percentage of those who reported that they had started smoking within the same age interval as the interval of their current age, i.e. starting to smoke one–two years before the survey. School preventive programmes did not appear to have any protective influence. Those who reported that they had had school classes on smoking-related issues in the previous term were slightly more likely to have begun smoking recently (OR=1.59; 95% CI = 1.00–2.52).

The risk of current smoking was significantly higher in all groups who reported that they had had classes on smoking some time before compared to those who had never had such classes, as under:

those who had had classes during the previous term: OR = 1.59 (95%CI = 1.05–2.42)  
two terms previously: OR = 1.71 (95%CI = 1.00–2.91)  
three terms previously: OR = 1.98 (95%CI = 1.10–3.58)  
more than a year ago: OR = 1.55 (95%CI = 1.01–2.39).

Only those who reported having had smoking-related classes during the term of the survey showed no significant difference from those who had never had those classes.

The risk of strong nicotine dependence was assessed as a proportion of smokers with strong nicotine dependence among all smokers with strong, mild and no dependence. Some protective influence is possible for those who reported having classes on short-term effects on smoking (OR = 0.07; 95%CI = 0.02–0.35). This type of intervention is shown internationally among those most promising approaches.

The last outcome measure was about behaviour related to stopping smoking, which was assessed as a proportion of those who stopped smoking within the previous year among all those who reported that they smoked within that year. No association was found between smoking-related classes in school and behaviour related to stopping smoking.

### **Conclusions**

There has recently been a significant increase in the provision of school-based smoking prevention activities. These programmes are, however, seemingly ineffective in both deterring young people from starting to smoke and encouraging young smokers to stop. Some of the school-based interventions may provoke smoking, while the association between current smoking and mentioning something about smoking in class may be just about intervention aimed at smokers urging them not to smoke in school.

Some promising results may be associated with discussions of the short-term effects of smoking, which may protect against experiments leading towards dependent smoking.

### ***Training programmes for specialists***

The normal education and postgraduate education programmes for health and social workers and teachers include the provision of information on the harmful impact on health of tobacco and on tobacco as a risk factor for some diseases. There is no training in counselling for stopping smoking. Some education programmes for social workers contain courses with components on encouraging behavioural changes in clients with substance abuse.

The Department of Education and Science of the Ministry of Health schedules courses on tobacco-smoking. Rectors of academies have the right to modify it, within limits of 15%. In the programme on narcology, the course on tobacco-smoking takes 14 hours (10 hours of practical lessons and 4 hours of workshops). The postgraduate course for doctors in narcology takes four hours (two hours for practical lessons and two hours of workshops). There are six hours of practical lessons in the course on current issues of narcology in family medicine for family doctors and general practitioners.

In 2005, the Institute of Public Health of the Ministry of Health analysed the typical programme for specialization of family doctors in order to estimate the coverage of prevention technologies,

primarily health promotion issues. At present the emphasis is not on health promotion and the primary prevention of chronic non-infectious diseases, but on such issues as vaccination, secondary prevention of diseases and personal hygiene. At the same time, the prevention of substance abuse is only partly covered in the psychiatry section. Such widespread factors of ill health as smoking generally do not appear there. According to the programme, every doctor is to obtain 227 practical skills, of which the prevention intervention skills only constitute 6% and most of them are the prevention of infectious diseases.

The curriculum for family doctors is reflected in the computer tests of knowledge. The typical tests were first developed by specialists at Lviv State Medical University and the Kiev Medical Academy of Postgraduate Education in 1999–2000 and recommended by the Ministry of Health. An analysis of computer tests of knowledge of the “Family medicine” course in the curriculum revealed that most sections of the programme include either no or very few questions on health promotion and prevention. Health promotion questions range from 2.7% of the general test questions (for higher category family doctors) to 3.0% (for first category family doctors and other doctors). All varieties of health promotion issues only concern the definition of terms (“Cite the most acknowledged definition of ‘healthy lifestyle’, “What is included in hygienic education?”) and one question (“How is it possible to estimate the level of hygienic knowledge of a population?”). Tests on substance abuse are formulated from the position of secondary prevention (“Smoking contributes to development of chronic bronchitis as a result of the negative health impact of cigarette smoke on...”).

### **Conclusions**

At present, only some narcologists attend special lectures and workshops on tobacco control issues. Other specialists receive such training only as a small part of health promotion education, which is also very limited.

A special tobacco control course should be introduced in educational institutions, providing both knowledge on tobacco-related harm and skills for counselling for stopping smoking.

### **Information campaigns on tobacco-related harm and tobacco control measures**

The information available for the population is considered here from two points of view: which information resources are available, and how information reaches the population.

#### ***Available information resources***

Tobacco control issues are covered in various media: television, radio, print media, etc.

There are some examples of irregular billboard campaigns on smoking prevention for young people, such as the campaigns conducted by the State Consumer Protection Committee (“Titanic”, “Dinosaurs” and others), campaigns conducted with tobacco industry funding (“Smoking? It is no time for it”, “I am successful without smoking”, etc). Tobacco industry campaigns usually do not disclose the source of funding and use messages which look preventive but are actually counterproductive (65).

Online resources regarding different tobacco-related problems are available at the Alcohol and Drug Information Centre websites in both Ukrainian (<http://adic.org.ua/coalition>) and Russian (<http://adic.org.ua/nosmoking>; <http://antismoke.org.ua/>, all accessed 24 July 2008).

Multiple studies of tobacco-related issues conducted by Ukrainian authors or by international teams in Ukraine are listed in Annex 4.

Although media coverage of tobacco-related issues has recently improved, the tobacco issue is still far from being a top propriety. Stoyka (27) analysed the content of the professional newspaper *Your Health* in 2002–2004 and found that tobacco-related coverage constituted only 0.4% of all articles and reports.

### ***Sources of tobacco-related information for the population***

Analysis based on the national population survey of tobacco use conducted in 2005 (15) has shown that the majority of the population derive their information on tobacco-related issues from three major sources. Almost half the population (48%) gets it from television, 28% from newspapers and 18% from magazines. People also find information through talking to friends and colleagues (13%), from the radio (10%), from health workers (10%), from relatives (8%), through classes in school or other educational institutions (4%) and the internet (1%). Even so, one quarter of the population reports that they receive no information regarding tobacco. Most of these sources reach the younger population more effectively than older people. Only the radio and health workers are mentioned by different age groups to a similar extent.

Women find tobacco-related information in magazines more frequently than men, whereas men are more likely to get it from friends, colleagues, family members and the internet.

Most sources of information are used more efficiently by people with higher levels of education, most obviously television, newspapers, magazines, communication with friends and colleagues, health workers and the internet. Thus the lower the level of education, the greater the probability that a respondent receives no information regarding tobacco.

The only source mentioned equally by all groups, taking into account gender, age and education, is the radio. In larger cities, people read magazines with tobacco-related information and use the internet. In towns and villages, on the other hand, radio and communication with health workers are better sources of information. Television, newspapers and other sources are used to the same extent everywhere.

Current smokers more frequently report that their friends and colleagues are sources of tobacco-related information. Non-smokers more frequently report school classes as a source of information compared to current and former smokers.

### ***Tobacco-related knowledge among the population***

Despite the tobacco-related information provided by the media, doctors and others, there is a low level of knowledge about the key smoking-related health problems.

As the 2005 national survey revealed (15), only 44% of respondents knew that cardiovascular diseases were associated with smoking, only 39% considered tobacco addictive, only 28% knew

that smoking harms the unborn baby, only 28% knew that passive smoking can cause diseases and death, and only 10% knew that smoking causes impotence.

Non-smokers and ex-smokers were better informed than current smokers.

In general, the best informed were people aged 45–74 years, women were better informed about tobacco than men, more educated people were better informed than the less educated, and unskilled workers and village-dwellers were the least informed.

### **Recommendations**

Radio should be the first option when nation-wide information campaigns are being planned to raise public awareness of tobacco-related issues.

### **Nongovernmental participation in tobacco control**

Nongovernmental organizations take an active part in the development of tobacco control policies, for example organizing and conducting:

- prevention activities, mainly among young people;
- assistance with stopping smoking, such as encouraging people to participate in the international QUIT&WIN competition and running a nongovernmental public telephone quit-line in 2002;
- preparation and publication of reports and scientific research (*e.g.* 12,14,15,39,40,66–69);
- development of guidelines on various tobacco control issues (*e.g.* 46,58,70,71).
- conducting campaigns in support of advanced tobacco control legislation: the 2001 campaign supporting legislative initiatives on banning tobacco advertising, and the 2004–2006 campaign in support of the signing and ratification of the WHO FCTC.

In 2000, several nongovernmental organizations working in tobacco control formed a Coalition of Civil Organizations and Initiatives “For a Tobacco Free Ukraine”, which currently unites more than 50 organizations. Its activities are presented at <http://www.adic.org.ua/coalition> (in Ukrainian). Since it was established, the Coalition has issued more than 50 press releases and since October 2005 it has issued a monthly electronic newsletter “For a Tobacco-Free Ukraine”, with free online subscription.

Nongovernmental organizations’ activities have become more comprehensive in recent years thanks to funding by international organizations such as WHO, UNICEF, the World Bank, the American Cancer Society, the Open Society Institute, the International Renaissance Foundation and the International Development Research Center (Canada). Their grants have been made to organizations such as the Alcohol and Drug Information Centre (ADIC-Ukraine), the Liberal Society Institute, the Cherkassy regional foundation “Parity”, the International Centre of Policy Studies, the Social Action Centre, the Civil Energy Foundation.

### ***Nongovernmental organizations' activities at local level***

Nongovernmental organizations have recently become actively involved at local level.

The Cherkassy regional charity, the Parity Foundation, initiated the first smoke-free local by-laws. In 2003, with funding from the regional administration, it established the Clean Air Centre and prepared a paper "On a smoking ban in public places" for consideration by the city council. The council included an item on a smoking ban in public places in the "Rules of maintenance of the territory". Cherkassy thus became the first city in Ukraine to adopt such a decision.

In 2005, the Clean Air Centre drew up the model decision "On tobacco-smoking regulation in a town" drawing on its own legal expertise. On June 16, 2005 the city council adopted decision No. 8-199 "On tobacco-smoking regulation in the city". To increase public awareness of smoking in public places, a series of posters "Do you smoke?! Do not poison the others!" was issued. As a result of the Clean Air Centre's activities, the owners of office centres in Cherkassy included an item on tobacco-smoking ban in rental contracts, and also an item on specially designated smoking places. The police department instructed its officers on prohibition of smoking during service hours. The Parity Foundation developed a model of an effective lobbying campaign for local authorities on tobacco control issues.

In 2006-2007, the Parity Foundation conducted the project "Making Ukraine smoke-free by means of municipal lobbying", supported by the International Renaissance Foundation. The project resulted in the adoption of tobacco control decisions in Kherson and Lutsk and encouraged anti-tobacco activities in Kirovograd, Sumy, Rivne, Uzhgorod and other cities.

One of the most active nongovernmental organizations working in tobacco control is the Lutsk Centre of Municipal Reforms "Lutsk-1432" (CMR). This organization initiated the revival of the city coordinating board on tobacco control. With the consultative support of experts from the CMR and the Cherkassy Parity Foundation, the city health care department prepared a draft of the city council decree "On regulation of the consumption of tobacco products on the territory of Lutsk city", which was adopted on 8 September 2006 with separate amendments regarding a list of public places where smoking is forbidden. A special commission carried out selective inspections of 25 catering enterprises in May 2007. In almost all of them some violations of the tobacco control legislation were revealed. In a public opinion survey carried out in Lutsk on the introduction of the tobacco control law, the population believed that the basic measures which could change the situation positively were fines, social advertising and strict control from different sides. Since February 2007, the city health care department, with consultative support of the CMR, has been working on the development of a programme for the prevention of tobacco-smoking in Lutsk city.

The Kherson regional organization of soldiers' mothers also had some success in lobbying for tobacco control decisions by local authorities. As a result of the organization's activities, the Kherson city council executive committee in 2006 adopted decree No. 434 "On a list of smoke-free public places in Kherson city". Based on the results of the negotiations and round tables with partner organizations and the involvement of the mass media, the strategic plan "Movement For Tobacco-Free Ukraine" was developed in the Kherson region. With the support of partner organizations, the enforcement of the smoking ban was monitored in the city's catering establishments, there was a public presentation of a poster exhibition for making Ukraine smoke-

free (with materials on the FCTC and the tobacco control law), and the enforcement of the smoke-free legislation on Kherson city public transport was monitored.

In Sumy city, a coalition of civil organizations and initiatives “For a Tobacco-Free Sumy” was established on the initiative of the Sumy regional organization “Sumy initiative”. As a result of the coalition’s informational activities, the draft decree “On tobacco-smoking regulation in the city”, which includes a list of public places where smoking is banned, was presented for consideration by the Sumy city council.

The “Pres-club of reforms” conducts tobacco control activities in Uzhgorod city. It initiated an advocacy campaign on the necessity for local authorities to ban smoking in public places.

The Foundation of Regional Initiatives and the Rivne branch of the civil network “OPORA” carry out joint activities on reducing the harmful impact of tobacco by means of restrictions on outdoor tobacco advertising in Rivne city. As a result of these organizations’ activities, the city council adopted the decree “On alcohol and tobacco advertising ban in Rivne city”. Currently the decree is not operating as the tobacco and advertising companies have appealed against it in court.

During 2007, the Open Doors organization in Kirovograd carried out activities on smoking restrictions in public places. On 31 May the organization conducted a round-table on tobacco-smoking restrictions in Kirovograd city. Representatives of the organization addressed the deputies of the Kirovograd city council on the critical situation regarding the harm of smoking for the population. The advocacy campaign in support of this decision is conducted with the mass media in Kirovograd city.

### ***Nongovernmental organizations and the tobacco industry***

Some nongovernmental organizations accept financial support from the tobacco industry. For example, the Public Council on Youth Problems reports on its website<sup>1</sup> that donations from tobacco companies were practically the only source of its funding.

The true purpose of the tobacco industry when providing donations and conducting so-called social dialogues is to find partners that will be instrumental in stopping or delaying measures to counteract children starting to smoke. They also wish to distract public energy and resources on deliberately ineffective actions, for example, on some “prevention programmes” that allegedly prevent children from smoking. Tobacco companies have a long history of running such programmes. A description of them and proofs of their ineffectiveness are presented in the book *Why tobacco companies finance the youth smoking prevention programmes (65)*.

The Preamble to the FCTC states that the Parties to this Convention “recognize the need to be alert to any efforts by the tobacco industry to undermine or subvert tobacco control efforts and the need to be informed of activities of the tobacco industry that have a negative impact on tobacco control efforts.” Article 5 states that “in setting and implementing their public health policies with respect to tobacco control, Parties shall act to protect these policies from commercial and other vested interests of the tobacco industry.” According Article 12, the countries shall adopt measures to promote “awareness and participation of public and private agencies and nongovernmental organizations ... in developing and implementing intersectoral

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<sup>1</sup> Kiev, Public Council on Youth Problems [web site] ([www.rada.idc.org.ua](http://www.rada.idc.org.ua), accessed 24 July 2008).

programmes and strategies for tobacco control;” only those organizations, however, which are “not affiliated with the tobacco industry”.

The primary objective of the tobacco industry is to make people smoke more, and the primary objective of public health organizations is to make people smoke less. Such absolute opposition of main interests makes any dialogue between tobacco companies and public health organizations impossible. For this reason, all over the world public health organizations reject any collaboration with tobacco companies.

WHO requests all its employees not to interact with representatives of the tobacco industry, except in very special cases, and to emphasize that such cases do not imply any relationship, collaboration or partnership between WHO and the tobacco industry.

UNICEF declines any donations from tobacco companies.

## **Tobacco-related studies conducted in Ukraine**

The following research institutes are involved in tobacco control research.

- Institute of Public Health, Ministry of Health – legislation and prevention issues.
- L.I. Medvedja Institute of Ecohygiene and Toxicology, Ministry of Health – research into tobacco products and the content of tobacco smoke.
- M.D. Strazheska Institute of Cardiology, Academy of Medical Sciences – epidemiology research.
- O.O. Marzeeva Institute of Hygiene and Medical Ecology, Academy of Medical Sciences – research into the tobacco-smoking prevalence among teenagers.
- F.G. Janovskogo Institute of Phthisiology and Pulmonology, Academy of Medical Sciences – impact of tobacco-smoking on respiratory diseases.
- Research Institute of Social and Judicial Psychiatry and Narcology, Ministry of Health – tobacco-smoking among young people, medical treatment of tobacco dependence.
- Institute of Paediatrics, Obstetrics and Gynaecologists, Academy of Medical Sciences – impact of tobacco-smoking on pregnancy, births, the foetus and newborns.

Studies are also conducted in other research institutes and universities: O.O. Bogomolets National Medical University, Vinnitsya State Medical University, Dnepropetrovsk State Medical Academy, Lviv National Medical University and other establishments.

A search of the databases of medical scientific publications and some other sources has revealed the following publications: 123 research papers in Ukrainian scientific journals; 11 doctoral theses in Ukraine; 26 books and booklets published in Ukraine; 12 research papers about tobacco control in Ukraine in international scientific journals.

A list of published research related to tobacco control in Ukraine is in Annex 4.

## Conclusions and recommendations

The present situation regarding tobacco in Ukraine gives rise to a high level of concern:

- The prevalence of current smoking among men in Ukraine (67%) is the highest in the Region.
- Smoking prevalence among women has been rapidly growing recently and in 2005 it was 20%, the highest rate in the countries of the former Soviet Union.
- The rate of teenagers starting to smoke early is higher than several years ago, especially among girls, and this group is at greater risk of becoming daily smokers and developing nicotine dependence.
- Smoking prevalence among health workers is just slightly lower than among the general population with the same level of education.
- A majority of the population (53%) perceive themselves to be exposed to environmental tobacco smoke on at least a daily basis. People cannot protect themselves against exposure to tobacco smoke. Only centrally adopted smoke-free policies in work- and public places can measurably decrease such exposure.
- The total number of tobacco-related deaths is about 100 000 or 13% of total mortality.
- About 70% of the tobacco-related deaths occur in the group aged 35–69 years, meaning that 19 years of life are lost per smoking-related death at this age.
- Over one million smokers have declared their need for help to stop smoking from a doctor or other specialist, but in 2006 such assistance was provided to only a few more than 10 000 smokers.
- The general foreign trade balance in tobacco is negative and has caused Ukraine to lose almost US\$ 2 billion within the last twelve years (1996–2007).

Smoking prevalence data would indicate that Ukraine is experiencing the second phase of a tobacco epidemic. Taking into account, however, the extremely high levels of smoking-related deaths among men resulting from a longstanding high male smoking prevalence, the situation corresponds more to the third stage of an epidemic. Tobacco control measures are urgently needed to prevent the even greater growth in tobacco-related deaths expected in the third stage of a tobacco epidemic.

At the same time, certain trends are visible that demonstrate that society is ready for decisive steps to combat the tobacco epidemic:

- the percentage of men who wish, and have already tried, to stop smoking is increasing;
- in 2006–2007, there was a downward trend in smoking prevalence among 15-year-olds;
- the percentage of the population who consider that tobacco smoke is definitely harmful increased from 50% in 2000 to 77% in 2005;
- the level of public support for smoke-free policies in public places rose from 87% in 2000 to 96% in 2005;

- a majority of the population (58%) agrees that people have the right to work in a smoke-free environment;
- a majority of the population supports the tobacco advertising ban, and this support increased in 2000–2005;
- as much as 83% of the population are in favour of stronger restrictions on the advertising of tobacco than the current ones, and 57% of the population supports a total ban;
- nongovernmental organizations are participating actively in tobacco control, and various tobacco-related studies have been conducted.

The Ukrainian authorities are paying greater attention to tobacco control policies. In 2005, Parliament adopted the tobacco control law. In 2006, Ukraine ratified the FCTC, a binding international agreement. In June 2008, on the initiative of the President, the Cabinet of Ministers approved the Concept of the National Programme for Reducing the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012, which was developed by the Ministry of Health.

Taking into account the provisions of the FCTC, international experience and public opinion, it is recommended that the following policies and measures should be implemented.

1. Tobacco taxes and prices should be raised.
  - Excise tax rates on tobacco products should be increased annually at a rate exceeding the rate of inflation, thus contributing to a reduction in smoking prevalence, and gradually but steadily approaching EU tax rates. This should provide substantial growth in governmental revenues, part of which could be used to fund national tobacco control measures.
2. Tobacco advertising, promotion and sponsorship should be banned.
  - All forms of tobacco advertising, promotion and sponsorship should be prohibited in all media, and the use of direct or indirect incentives that encourage the purchase of tobacco products by the public restricted.
3. People should be protected from second-hand tobacco smoke.
  - The recommendations of the FCTC Second Conference of Parties on protection from exposure to tobacco smoke should be implemented with the aim of gradually making work- and public places 100% smoke-free.
4. The population should be warned about the dangers of tobacco.
  - Information for tobacco consumers should be improved by increasing the size and number of health warnings and adding graphic images to them.
  - Awareness campaigns should be systematically conducted related to (i) the health risks of tobacco consumption and exposure to tobacco smoke and (ii) raising support for tobacco control policies.
  - Public and private agencies and nongovernmental organizations not affiliated with the tobacco industry should be informed and involved in developing and implementing information, education and other tobacco control activities.

- Education and training curricula for medical, pharmaceutical, social and pedagogical workers should include special themes on methods of preventing and stopping the consumption of tobacco.
5. People who want to stop using tobacco should be offered help.
- The curricula for graduate and postgraduate training of health professionals should include methods of providing adequate treatment for those who wish to stop smoking. These programmes should include issues relating to the impact of tobacco on health and training to diagnose patients' smoking status, nicotine dependence and readiness to change.
  - Protocols related to help for people to stop smoking should be developed and introduced into routine health care protocols.
  - Special surgeries, counselling services and quitlines should be established to help people to stop smoking.
  - Smoking cessation medication should be made more available and affordable for patients.
6. The tobacco epidemic and prevention policies should be carefully monitored.
- A national system of monitoring and epidemiological surveillance of tobacco consumption and related social, economic and health indicators should be established with, in particular, evaluation of governmental tobacco control policies. The results of such monitoring should be presented annually to the public, preferably in the form of a national report.
  - The medical registration system should include information on the smoking status of every client of the health care services.
  - Studies on the prevention of and reduction in tobacco-smoking should be conducted, possibly in collaboration with experts from other countries, with a comparative effect evaluation of specific tobacco control policies.

To ensure the proper development and implementation of the above recommendations, a national authority for intersectoral coordination should be established by law or governmental decree with an annual budget, adequate number of trained staff, appropriate authority and competencies.

It is also very important to protect public health policies with respect to tobacco control from commercial and other vested interests in the tobacco industry.

At present Ukraine is experiencing very favourable conditions for the resolute development of tobacco control policies, especially the public awareness and support for such policies, policy-makers (including the President) who openly support the introduction of such measures, and the ratification of the WHO FCTC.

The opportunities afforded by these favourable conditions and the adoption of the National Programme for Reducing the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012, with adequate human, material, technical and financial resources, can eventually be used for the sake of the life and health of the people of Ukraine.

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*Annex 1*

**LAW NO. 2899-IV ON MEASURES TO PREVENT AND REDUCE THE USE OF TOBACCO PRODUCTS AND THEIR HARMFUL IMPACT ON PUBLIC HEALTH**

**Adopted by the Parliament of Ukraine on 22 September, 2005**

**Signed by the President of Ukraine on 18 October, 2005**

**Officially published and entered into force on 25 October, 2005**

*With the amendments adopted by Law of Ukraine No 3425-IV “Amendments to some laws of Ukraine on state regulation of the production of and trade in tobacco products”.*

This law defines the main principles and directions of the state policy on preventing the smoking of tobacco products, reducing the level of their consumption in the population, restricting children’s access to them, and protecting public health from the harm inflicted by the illnesses, disability and mortality caused by the smoking or other type of consumption of tobacco products.

**Article 1. Definition of the terms**

For the purposes of this law, the following terms are used as shown.

- Public place – part or parts of any building or premises which are accessible or open to the public freely, or by invitation, or for charge, permanently, periodically or now and then, including doorways, underground passages and stadiums.
- Dependence on the consumption of tobacco products – psychological or physical dependence of a person on nicotine and other ingredients of tobacco products which enter the body as a result of the person’s consumption of tobacco.
- Tobacco replacements – products that by their effects on human health are equal to tobacco but do not contain tobacco.
- Ingredients of tobacco products – any substances, except tobacco, that are used in the production of tobacco products.
- Smoking of tobacco products – actions that result in the combustion of tobacco products and the appearance of tobacco smoke, which is released into the air and inhaled by a person who smokes the product.
- Health warning – information on the harmful influence of the consumption of tobacco products on human health, which is placed on the packs, boxes, souvenir boxes and packaging (except for the transparent wrapper) in which tobacco products are in packs or boxes. The health warning consists of the black rectangular frame, which is at least 3 mm wide, and the text included in the frame. The health warnings can be main and additional.
- Nicotine – nicotine alkaloids.

- Items associated with tobacco consumption – cigarette cases, cigarette holders, pipes, cigarette paper, filters, cigar cutter and so on that are necessary for the consumption of tobacco products, except for lighters and matches.
- Workplace – place of permanent or temporary stay of a worker while working.
- Tar – moist, waterless, nicotineless smoke condensate.
- Tobacco – a plant of the solanaceous family containing nicotine.
- Tobacco products – filter or non-filter cigarettes, cigars, cigarillos, pipes; smelling, sucking and chewing tobacco, makhorka, and other products of containing tobacco or its replacements for smoking, smelling, sucking or chewing.
- Tobacco smoke – products of the combustion of tobacco products that are released into the air as a result of their smoking.
- Package – a pack, box or any other packaging of tobacco products, except for the transparent wrapper, which is used in retail sale (excluding packaging for transport).

## **Article 2. Legislation of Ukraine on measures to prevent and reduce the use of tobacco products and their harmful impact on public health**

The Ukrainian legislation on measures to prevent and reduce the use of tobacco products and their harmful impact on public health is based on the Constitution of Ukraine and consists of the bases of the Ukrainian legislation on health protection, this law and other regulatory acts adopted in accordance with the laws.

If, by international agreement with Ukraine, the agreement for obligation of which is given by Parliament, other rules have been established than those stipulated by the legislation of Ukraine on measures to prevent and reduce the use of tobacco products and their harmful impact on public health, the rules of the international agreement shall be applied.

## **Article 3. Main objectives of the Law**

The main objectives of the law are:

- to determine the legal and organizational bases of the national policy aimed at preventing tobacco-smoking by children and young people and at reducing the consumption of tobacco products by the population with the ultimate goal of reducing the risk of tobacco-related diseases, disability and early mortality;
- to define the authority of the Cabinet of Ministers of Ukraine, the central executive power authority in the sphere of health care, the Council of Ministers of the Autonomous Republic of Crimea and local executive power bodies, local self-government bodies as regards the prevention and reduction of the use of tobacco products and their harmful impact on public health;
- to reinforce state control over the safety of tobacco products manufactured or imported into Ukraine, and the reduction of the toxicity of tobacco products by decreasing the yields of nicotine, tar, other harmful substances and ingredients of tobacco products and their emissions;

- to improve preventive and awareness-raising measures aimed at preventing and reducing the smoking or other methods of consumption of tobacco products;
- to provide medical treatment for tobacco dependence for persons wishing to stop smoking or otherwise using tobacco products, and to promote healthy lifestyles;
- to ensure that people are protected from harmful exposure to tobacco smoke in work- and public places;
- to establish the economic and other conditions which encourage restrictions on the smoking or other use of tobacco products, the protection of public health, a decline in morbidity and increase of length of human life;
- to provide information for the population on the risks and harmful health consequences of smoking or otherwise using tobacco products regardless of age and health conditions;
- to establish responsibility for violation of the legislation on measures to prevent and reduce the use of tobacco products and their harmful impact on public health.

#### **Article 4. Basic principles of state policy to prevent and reduce the use of tobacco products and their harmful impact on public health**

According to this Law, the objectives of the state policy to prevent and reduce the use of tobacco products and their harmful impact on public health are based on the principles of:

- legality;
- the complexity of the legal, economic, medical and other measures directed at the protection of public health by preventing and reducing the use of tobacco products;
- consistency and the gradual implementation of the measures directed at reducing the use of tobacco products among different age and social population groups;
- the priority of prevention measures directed at discouraging the use of tobacco products among children and young people;
- an individual approach and the availability of treatment and prevention measures for every person wishing to stop smoking or otherwise using tobacco products;
- the availability of information for the population about the harm to health of the use of tobacco products and exposure to tobacco smoke and the advantages of a healthy lifestyle.

#### **Article 5. Basic directions of the state policy to prevent and reduce the use of tobacco products and their harmful impact on public health**

The basic directions of the state policy on preventing and reducing the use of tobacco products and their harmful impact on public health are:

- to implement a complex of measures to protect public health from the harmful impact of tobacco smoke, prevent the taking-up of tobacco-smoking, and restrict the use of tobacco products, primarily among children and young people;
- to improve information for the population about the risks and harmful consequences for health of the smoking or other use of tobacco products, and the harmful impact of exposure to tobacco smoke;

- to ensure the availability of preventive, diagnostic and medical assistance and providing effective medicines to all persons who smoke tobacco products and wish to stop by establishing national programmes on prevention, diagnostics and medical treatment of tobacco dependence;
- to strengthen the material and technical bases of health service establishments to implement the complex of measures on renewing and strengthening public health and promoting healthy lifestyles;
- to improve the hygienic regulation of tobacco products and methods of measurement of tar and nicotine and other harmful substances that are contained in tobacco products and their emissions, and meeting the limits established by law, taking into account the requirements of international legislation;
- to ensure that enterprises follow the proper standards, norms and rules for the manufacture and sale of tobacco products;
- to develop scientific research on prevention of the use of tobacco products and medical treatment of tobacco dependence;
- to assist the media to support the implementation of national tobacco control policies.

#### **Article 6. Authority of the Cabinet of Ministers of Ukraine to prevent and reduce the use of tobacco products and their harmful impact on public health**

The Cabinet of Ministers of Ukraine:

- ensures the implementation of the consolidated national policy on preventing and reducing the use of tobacco products and their harmful impact on population health, and develops and approves relevant programmes;
- ensures the effective use of expenditure from the state budget for implementing the programmes on tobacco control and protection of public health from the harmful consequences of tobacco use;
- develops proposals to improve tax and financial policy for counteracting the prevalence of smoking or other use of tobacco products and reducing their harmful impact on public health;
- coordinates the work of executive power bodies in implementing the national policy on preventing and reducing the use of tobacco products and their harmful impact on public health;
- introduces a system to monitor tobacco use by the population and the prevalence of tobacco-related diseases, and to evaluate the efficiency of the implementation of the national tobacco control policy;
- adopts relevant international agreements on behalf of Ukraine, and carries out other statutory powers.

## **Article 7. Authority of the central body with executive power in health protection to prevent and reduce the use of tobacco products and their harmful impact on public health**

Within the limits of its jurisdiction, the central body with executive power in health protection:

- implements the national policy to prevent and reduce the use of tobacco products and their harmful impact on population health;
- determines in accordance with established procedure, taking into account the norms of international law, the lists of toxic substances and ingredients of tobacco products and their emissions;
- develops and introduces, in accordance with established procedure, measures on the diagnosis and medical treatment of tobacco dependence in primary health care;
- provides accessible, high-quality and effective treatment and prevention assistance to persons who wish to stop smoking or otherwise using tobacco products;
- takes measures to prevent the smoking of tobacco products among the population, primarily among children and young people;
- informs the population through the media about harmfulness of smoking or other methods of using tobacco products and promotes medical knowledge about the prevention of tobacco-related diseases;
- participates in the development of educational programmes for the prevention of smoking or other methods of using tobacco products and the medical treatment of tobacco dependence;
- coordinates health care establishments and research institutions, which are in its sphere of management, in conducting activities directed towards restricting the use of tobacco products and reducing their harmful impact on public health;
- evaluates activities to protect the population's health from the harmful consequences of the use of tobacco products, and makes analyses and forecasts of the situation regarding tobacco-related morbidity;
- organizes research on preventing and reducing smoking or other use of tobacco products among the population, and the medical treatment of tobacco dependence;
- carries out, according to the law and taking into account international legislation, the hygienic regulation of dangerous tobacco-related factors;
- takes part in drawing up government orders regarding the production of medications necessary for medical treatment of tobacco dependence, implementing other prevention and medical measures, and conducting education and training of specialists who carry out activities aiming to prevent and reduce the smoking or other use of tobacco products among the population and conduct medical treatment of tobacco dependence;
- ensures cooperation with other central and local executive power bodies and public organizations in protecting public health from the harmful consequences of the use of tobacco products;

- takes part in developing proposals for the improvement of tax and financial policy to counteract the prevalence of the smoking or other use of tobacco products and reduce their harmful impact on public health;
- takes part in international cooperation with the aim of preventing the use of tobacco products and reducing their harmful impact on public health;
- carries out other statutory powers.

### **Article 8. Authority of the Council of Ministers of the Autonomous Republic of Crimea and local bodies with executive power to prevent and reduce the use of tobacco products and their harmful impact on public health**

Within the limits of their jurisdiction, the Council of Ministers of the Autonomous Republic of Crimea and local bodies with executive power:

- implement national, regional and other programmes to prevent and reduce the use of tobacco products and their harmful impact on public health;
- ensure the implementation of prevention and medical activities directed at preventing and reducing the use of tobacco products and their harmful impact on public health;
- organize surveillance and monitoring of information on the prevalence of the use of tobacco products in the region, and conduct prevention activities aiming to restrict the use of tobacco products in the population and protect primarily children and young people from the harmful impact of exposure to tobacco smoke;
- inform the population through the media about the harm to human health from the use of tobacco products, and on morbidity and mortality caused by the use of tobacco products in the region;
- assist in providing financial resources for treatment and prevention activities to prevent morbidity caused by the use of tobacco products and exposure to tobacco smoke;
- carry out other statutory powers.

### **Article 9. Authority of local government bodies to prevent and reduce the use of tobacco products and their harmful impact on public health**

Within the limits of their jurisdiction, local self-government bodies:

- control the implementation of the relevant programmes on preventing and reducing the use of tobacco products and their harmful impact on public health;
- assist in providing financial, material and technical resources for activities directed at limiting the use of tobacco products and reducing their harmful impact on public health;
- control, within their areas of responsibility, the conduct of prevention and medical activities concerned with restricting the use of tobacco products and reducing their harmful impact on public health, and establish smoke-free zones;
- ensure the availability of prevention activities and provide in communal health care establishments effective medical assistance, including medicines, for persons who wish to stop using tobacco;
- carry out other statutory powers.

## **Article 10. Requirements concerning activities related to the production of, wholesale and retail trade in, and export and import of tobacco products**

Activities related to the production of, wholesale and retail trade in, and export and import of tobacco products, are carried out according to law, taking into account the prohibitions contained in this article.

It is prohibited to produce (except for export) and to import for sale in Ukraine tobacco products as follows:

- cigarettes, in which yields in the smoke of one cigarette are greater than 12 mg of tar and 1.2 mg of nicotine;
- tobacco products which do not carry health warnings on the packaging;
- tobacco products with the use on their packages of terms, descriptors, trade marks, images, symbols or any other signs that can be misleading or create an erroneous impression about the characteristics or health effects of tobacco products or directly or indirectly give the false impression that a particular tobacco product is less harmful than other tobacco products, including such terms, as “low tar”, “light”, “ultra-light” and their analogues in other languages.

Manufacturers of tobacco products are prohibited from placing within the packages inserts which have terms, descriptors, trade marks, images, symbols or any other signs that can be misleading or create an erroneous impression about the characteristics or health effects of tobacco products or directly or indirectly give the false impression that a particular tobacco product is less harmful than other tobacco products, including such terms, as “low tar”, “light”, “ultra-light” and their analogues in other languages.

The inclusion of tobacco products and objects connected with the consumption of tobacco products in humanitarian aid is prohibited.

Support for the production (import) of tobacco and tobacco products for sale in the customs area of Ukraine through assistance to entrepreneurs in the form of state financing, provision of costs from the national budget of Ukraine and local budgets, financial assistance, financial guarantees, grants, subsidies or favourable loans is prohibited.

## **Article 11. Requirements in relation to content of substances and ingredients harmful to human health present in tobacco products and their emissions, and information about harmful substances and ingredients of tobacco products**

Measurements of the yields of nicotine, tar, other substances harmful to human health, including the ingredients of tobacco products, in tobacco products and tobacco smoke are carried out by organizations (laboratories) designated in an order stipulated by law and included by the authority on technical regulation and consumer policy in a corresponding list, which is made public.

Control over enforcement of nicotine and tar yields, stipulated by law, and also yields of other substances harmful to human health and ingredients of tobacco products, which are produced or sold in Ukraine, is carried out by the central authority with executive power in health protection.

The central authority with executive power in health protection annually publishes the lists of substances harmful to human health and ingredients of tobacco products, which are present in tobacco products and in their emissions, and also informs the population through the media about the harmful substances and ingredients of tobacco products, which are present in tobacco products and in their emissions, and about the harmfulness to human health of using tobacco products.

Producers or importers of tobacco products are obliged, at the request of the central authority with executive power in health protection in the order set by the government of Ukraine, to provide information on the yields of substances harmful to human health: nicotine, tar and other harmful substances and ingredients, which are present in tobacco products and their emissions.

## **Article 12. Health warnings for tobacco users**

All packaging of tobacco products must carry the general health warning for tobacco users and one additional health warning about the harm to human health of smoking tobacco products and information about the yields of nicotine and tar which are present in tobacco products and in their emissions.

On one principal surface of the packaging of tobacco products the general health warning should be placed with the following text: “Smoking causes cardiovascular diseases and lung cancer”.

On the other principal surface of the packaging of tobacco products one of six additional health warning should be placed with the following texts: “Smoking when pregnant harms your child”; “Tobacco smoke harms the health of those around you; “Smoking is addictive, do not start to smoke!”; “Smoking causes impotence”; “Protect children: do not make them breathe your smoke”; “Smokers die early”. The producer of the tobacco products is to place every variant of the additional health warning texts by turn on tobacco products packages.

The general and additional health warnings must cover no less than 30% of the area of the external surface of all the greater sides of the packaging of tobacco products.

Information on nicotine and tar yields which are present in tobacco products and in their emissions is placed on the external surface of one smaller side of the packaging of tobacco products and must cover no less than 15% of the area of this surface.

The texts of the general and additional health warnings, which are placed on all packaging of tobacco products, must be clear, surrounded by a black border no less than three millimeters in width, printed in black bold type on a white background, in lower-case type, except for the first letter of the warning, centered in the area in a way to ensure the integrity of these texts when the packaging of the tobacco products is opened, and not obscured by other printed information or by excise tax stamps.

### **Article 13. Restrictions on the sale and use of tobacco products**

The sale of tobacco products and objects connected with their use is banned to persons who have not reached 18 years of age. The law can impose other restrictions on the sale of tobacco products.

The smoking of tobacco products in workplaces and in public places is banned, with the exception of specially designated places. The owner or persons authorized by him, whether tenants of the proper building or separate apartments, are obliged to designate special places for smoking, equipped by drawing ventilation or other facilities for the elimination of tobacco smoke, and also to place visible information about the location of such places and about the harm to human health of tobacco use. The law can impose other restrictions on places for the use of tobacco products.

At least 50% of the area of public places should be reserved for persons who do not smoke; non-smoking areas should be located in such a way that tobacco smoke does not penetrate into them.

### **Article 14. Dissemination of knowledge about the harm of using tobacco products and measures on preventing the use of tobacco products**

In order to prevent the use of tobacco products and reduce their harmful impact on public health, the central authorities with executive power in health protection, education and science, youth and sport, culture and tourism are obliged, within their jurisdictions, to ensure (i) at least quarterly publication in the print media and in social advertising on television and radio of other information materials on the harm to human health of the use of tobacco products and exposure to tobacco smoke, especially to children and young people, and (ii) to promote healthy lifestyles.

All educational establishments in Ukraine, regardless of their ownership, must include in their educational/professional programmes tutorials on the special themes of the harm for human health of smoking or otherwise using tobacco products, primarily for children and young people, and about the advantages of a healthy lifestyle.

The education and postgraduate education programmes of medical, pharmaceutical, social and pedagogical workers must contain special themes on methods and activities for preventing and stopping the use of tobacco products.

### **Article 15. Prevention of the use of tobacco products and medical treatment of tobacco dependence**

Medical workers in health care establishments, regardless of ownership are obliged:

- to promote medical knowledge about the prevention of diseases caused by smoking or otherwise using tobacco products, and to prevent their use in the population, primarily among children and young people;
- to provide practical advice on a healthy lifestyle and recommendations against the start of smoking or other use of tobacco products or on stopping using them;

- to explain the harmful consequences for human health of smoking or otherwise using tobacco products and exposure to tobacco smoke;
- to provide people who wish to stop being dependent on tobacco with the proper treatment and prevention assistance.

Health care establishments, regardless of ownership, are obliged to put in an obvious place on the premises where they provide services information on the harmful consequences for human health of smoking or other use of tobacco products and exposure to tobacco smoke, practical advice on a healthy lifestyle, and recommendations for stopping smoking or other use of tobacco products.

Medical workers working in educational institutions must assist in the introduction of educational programmes on preventing the use of tobacco products.

Sanitary-epidemiological services and health centres are obliged to conduct in their regions awareness activities for the population about the consequences of using tobacco products and to promote a healthy lifestyle. The National Board of Ukraine on Television and Radio Broadcasting and the special central body with executive power on television and radio are obliged to assist these services in conducting such activities.

## **Article 16. Advertising of tobacco products**

The advertising of tobacco products is carried out according to the law on advertising.

## **Article 17. Monitoring of the implementation of activities under the state policy to prevent and reduce the use of tobacco products and their harmful impact on public health**

In order to ensure the implementation of the basic directions of state policy to prevent and reduce the use of tobacco products and their harmful impact on public health, the central body with executive power in health protection conducts monitoring and evaluation of efficiency, including:

- surveillance of public health with the purpose of tracking changes in health conditions connected with the measures carried out with the aim of preventing and reducing the smoking or other use of tobacco products, primarily among children and young people;
- research on the prevalence of the use of tobacco products among the population and evaluation of findings;
- development and introduction into medical practice of methods of prevention, diagnostics and medical treatment of tobacco dependence and tobacco-related diseases.

The central body with executive power in health protection is obliged annually, in accordance with established procedure, to make public the results of monitoring in the media.

## **Article 18. International cooperation**

Ukraine cooperates with the relevant international organizations on tobacco control and activities to counteract the illegal turnover in tobacco products, the introduction of joint activities on the prevention of tobacco use and tobacco control, and the harmonization of national standards for requirements for the safety of tobacco products with international standards. For this purpose, there are exchanges of experience concerning information and progressive technologies as well as professional and scientific cooperation between relevant bodies and organizations.

The state supports all forms of international cooperation on prevention of the use of tobacco products that do not conflict with the legislation of Ukraine.

## **Article 19. Bodies with state control for enforcement of the provisions of this Law**

The state control for enforcement of the provisions of this Law is carried out by the proper specially authorized central body with executive power within the limits of their powers defined by law.

## **Article 20. Responsibility for violation of the legislation on measures to prevent and reduce the use of tobacco products and their harmful impact on public health**

Persons guilty of violating legislation on measures to prevent and reduce the use of tobacco products and their harmful impact on public health carry responsibility by law.

In cases where the norms of this Law are violated, the authority responsible for technical regulation and consumer policy fines the offenders as under:

- for the retail sale of tobacco products without the medical warnings for tobacco users – from Hrv 50 to Hrv 10 000;
- for the retail sale of tobacco products where harmful substances exceed the limits set by this Law – from Hrv 100 to Hrv 20 000;
- for the wholesale sale of tobacco products in Ukraine without the medical warnings for tobacco users – from Hrv 500 to Hrv 10 000;
- for the wholesale sale of tobacco products in Ukraine where harmful substances exceed the limits set by this Law – from Hrv 1000 to Hrv 20 000;
- for the production and putting on sale in Ukraine of tobacco products without the medical warnings for tobacco users – from Hrv 2000 to Hrv 20 000;
- for the production and putting on sale in Ukraine tobacco products where the harmful substances exceed the limits set by this Law – from Hrv 5000 to Hrv 50 000.

Appeals against the decision of the authority responsible for technical regulation and consumer policy can be made to the court.

The fines imposed by the authority responsible for technical regulation and consumer policy are paid in the order set by the Law.

The fines stipulated in the second paragraph of this Article are imposed by the head or deputy head of the authority responsible for technical regulation and consumer policy, by the head or deputy head of the authority responsible for technical regulation and consumer policy of the Autonomous Republic of Crimea, by the head or deputy head of the authority responsible for technical regulation and consumer policy of the regional councils, Kiev city council and Sebastopol city council, or by the head of the authority responsible for consumer rights protection of local government, after considering the materials which prove that a violation has been committed.

The act on perpetration of the offence, mentioned in the second paragraph of this Article, is drawn up by the authorized representative of the authority responsible for technical regulation and consumer policy which, together with the written explanation of the offender and relevant documents, are sent within three days to the public servant who has the right to impose fines.

A decision on imposition of a fine is made within ten days of receipt of the documents mentioned in the sixth paragraph of this Article. The decision on imposition of a fine takes the form of a resolution that is sent to the offender, who is to be punished, and to the bank where this legal entity has a current account.

The imposition of a fine does not free the persons guilty of violating this Law from the disciplinary, administrative, civil or criminal responsibility set by the laws of Ukraine.

## **Article 21. Final statements**

**I.** This Law enters into force from the day of publication, except for: part three of Article 13, which enters into force from 1 July 2006; the third and fourth indentions of part two of Article 10, articles 12 and 20 and sub-clause “c” of clause two of the second item of part two of Article 21 “Eventual positions”, which enters into force from 1 January 2007; the second indentation of part two of Article 10 and sub-clause “b” sub-clause of second item of Article 21 “Eventual positions”, which enters into force from 1 January 2009.

Until 1 January 2007, it is permitted to produce, import, and offer for wholesale and retail sale tobacco products with labelling responding to provisions set by the laws of Ukraine “On Measures to Prevent and Reduce the Use of Tobacco Products and their Harmful Impact on Public Health” and “On the State Regulation of Production and Turnover of Ethyl Alcohol, Brandy and Fruit Spirits, Alcohol and Tobacco Products”, taking into account the changes introduced by this Law and Law of Ukraine of 22 September 2005 No. 2899–IV.

**II.** The following legislative acts of Ukraine will be amended and changed as follows.

1. In the Code of Ukraine on administrative offences (Information of Verhovna Rada of Ukraine, 1984, addition No. 51, item 1122):

(a) Articles 168–2 and 175–1 shall be amended with the following content:

Article 168–2. Sale of products in violation of the requirements for health warnings for tobacco users.

“The sale of products in violation of requirements on health warnings for tobacco users

- is prosecuted by a fine in the amount of five to thirty times the untaxed minimum of the offender’s income.”

Article 175–1. Smoking of tobacco products in places where it is forbidden.

“The smoking of tobacco products in places where it is forbidden by the law and also in places defined by the decision of the village, town or city council

- is prosecuted by a warning or a fine in the amount of one to five times the untaxed minimum of the offender’s income.

A repetition of the offence mentioned in the first part of this article within one year by the person who had already received the administrative penalty

- is prosecuted by a warning or a fine in the amount of five to seven times the untaxed minimum of the offender’s income.”

(b) Article 156 shall be changed with the following wording.

Article 156. Violation of rules of trade in alcohol and tobacco products

“Retail or wholesale, including import or export, trade in ethyl alcohol, brandy or fruit spirits, alcohol or tobacco products without a licence or without excise stamps or with counterfeit stamps

- is prosecuted by a fine of from twenty to one hundred times the untaxed minimum of the offender’s income with confiscation of products and the profit received from the sale.

Violation by a worker in a trade or catering establishment of the rules on the sale of alcohol and tobacco products, in particular the sale of alcohol and tobacco products in premises or areas where it is forbidden by law and in places defined by decision of the village, town or city council where the sale of alcohol and tobacco products is forbidden; as well as the sale of alcohol and tobacco products by vending machines or by minors and the sale of alcohol and tobacco products to a person who is below 18 years old:

- is prosecuted by a fine of from five to twenty times the untaxed minimum of the offender’s income.

Trading in alcohol or tobacco products by street vendors

- is prosecuted by a fine of from three to ten times the untaxed minimum of the offender’s income with confiscation of commercial products.

Repetition of the actions mentioned in the first or third part of this article by a person who had within the last year already received the administrative penalty for the same offences

- is prosecuted by a fine of from twenty to thirty times the untaxed minimum of the offender’s income with confiscation of commercial products.”

(c) The second part of Article 13 after the words and numbers “first and second parts of the Article 130” shall be amended by the words and numbers “second part of Article 156”.

- (d) The second indention of part two of Articles 110 and 115, and the second indention of part three of Articles 117 and 119, the words and numbers “from 0,5 to one times the untaxed minimum of the offender’s income” shall be amended with the words “from one to three times the untaxed minimum of the offender’s income”.
- (e) Article 218:
- in the first part, the word and numbers “Articles 159” shall be replaced by the words and numbers “Article 159, Article 175–1 ( for violations committed in the places forbidden by the decision of the village, town or city council), Article ...”;
  - in the second part, the number “179” shall be replaced by the words and numbers “Articles 175–1 (for violations committed in the places forbidden by the decision of the village, town or city council), Article 179”.
- (f) Article 219, the number “179” shall be replaced by the words and numbers “Articles 175–1 (for violations, committed in the places forbidden by the decision of the village, town or city council), Article 179”.
- (g) Article 221, the words and numbers “parts first and third of Article 156” shall be replaced by the words and numbers “parts first, third and fourth of Article 156”.
- (h) Article 222:
- in the first part, the number “176” shall be replaced by the words and numbers “Articles 175–1 (except for violations, committed in the places forbidden by the decision of the village, town or city council), Article 176”;
  - in the first and third indentions of item 1 of part two the word and numbers “Articles 176” shall be replaced by the words and numbers “Articles 175–1 (except for violations, committed in the places forbidden by the decision of the village, town or city council), Article 176”.
- (i) Article 244–4, in the first part the number “170” shall be replaced by the words and numbers the “Article 168–2, Article 170”.
- (j) Article 255:  
in the first part:
- in the second indention of item 1, the number “176” shall be replaced by the words and numbers “Article 175–1 (except for violations, committed in the places forbidden by the decision of the village, town or city council), Articles 176”;
  - in item two, the number “183” shall be replaced by the words and numbers “Article 175–1 (for violations, committed in the places forbidden by the decision of the village, town or city council), Articles 183”;
  - the second indention of item 9 shall be amended by the insertion after the number “160” of the number “175–1”.
- (k) Article 294, in the first part the words and numbers “first and third parts of Article 156” shall be replaced by the words and numbers “first, third and fourth parts of Article 156”.

2. In the Law of Ukraine “On the state regulation of production and turnover of ethyl alcohol, brandy and fruit spirits, alcohol and tobacco products” (Information of Verhovna Rada of

Ukraine, 1995 p. No. 46, item 345; 1997 p. No. 45, item 286; 1998 p. No. 26, item 168; 2000 p. No. 30, item 240; 2001 p. No. 11, item 45; 2002 p. No. 26, item 175 No. 50, item 365; 2005 p. No. 4, item 91 No. No. 17–19, item 267):

(a) the seventh indention of Article 1 shall be changed as follows:

“Tobacco products – filter or non-filter cigarettes, cigars, cigarillos, as well as pipe, smelling, sucking and chewing tobacco, makhorka, and other products of tobacco or its replacements for smoking, smelling, sucking or chewing”;

(b) the second part of Article 9 shall be deleted;

(c) the eighth and ninth indentions of part three of Article 11 shall be changed as follows:

“Information on nicotine and tar yields, which are present in tobacco products and in their emissions, is placed on the external surface of one smaller side of the packaging of tobacco products and must cover no less than 15% of the area of this side”;

“The texts of the general health warning “Smoking causes cardiovascular diseases and lung cancer” and one of six additional health warnings should be placed with the following texts: “Smoking when pregnant harms your child”; “Tobacco smoke harms the health of those around you; “Smoking is addictive, do not start to smoke!”; “Smoking causes impotence”; “Protect children: do not make them breathe your smoke”; “Smokers die early”. These warnings, which are placed on the packaging of all tobacco products, must be clear, surrounded by a black border no less than three millimeters in width, printed in bold black type on a white background in lower-case type, except for the first letter of the warning, centered in the area in such a way as to ensure the integrity of these texts when the packaging of the tobacco products is opened, and not obscured by other printed information or by excise tax stamps.”

**III.** The Cabinet of Ministers of Ukraine, within six months of the date of publication of this Law, shall:

- present for consideration of the Verhovna Rada of Ukraine proposals on amendments to the laws of Ukraine in accordance with this Law;
- bring the normative and regulatory acts into conformity with this Law;
- ensure that the normative and regulatory acts of ministries and other central bodies with executive power are brought into conformity with this Law.

President of Ukraine Victor YUSHCHENKO

*Annex 2*

CONCEPT OF THE NATIONAL PROGRAMME FOR REDUCTION OF THE  
HARMFUL IMPACT OF TOBACCO ON PUBLIC HEALTH IN UKRAINE FOR  
2008–2012

On 4 June 2008, the Cabinet of Ministers of Ukraine approved by Order N 797-r, On Approval of the Concept of the National Programme for Reduction of the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012,

1. to approve the Concept of the National Programme for Reduction of the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012, which is added, and to identify the Ministry of Health as the main agency for the Programme;
2. that the Ministry of Health, in cooperation with other interested central governmental bodies, shall develop and present within three months to the Cabinet of Ministers of Ukraine the draft of the National programme for Reduction of the Harmful Impact of Tobacco on Public Health in Ukraine for 2008–2012.

Prime Minister of Ukraine

Julia Timoshenko

*Approved by Order of the Cabinet of Ministers of Ukraine on 4 June 2008, N 797-r*

**Description of the problem addressed by the Programme**

Tobacco-smoking is considered one of the main negative factors influencing public health in areas such as the development of cardiovascular and chronic pulmonary diseases and various cancer disabilities. According to estimates by WHO experts, annual tobacco-related death toll in Ukraine is about 100 000, accounting for 13% of all deaths.

Passive smoking is dangerous, especially for children and young people. WHO has concluded that passive smoking by children causes bronchitis, pneumonia, asthma attacks, middle ear infections, probably cardiovascular and neurological complications and other conditions. The close relationship between smoking and drug addiction should also be taken into account: 85% of drug addicts have smoked in the past or do so now. The risk of developing a drug addiction is increased among teenagers whose mothers smoked during pregnancy.

The household surveys conducted by the State Statistics Committee demonstrate that the prevalence of tobacco-smoking among the population aged 12+ years increased from 22.9% in 2002 to 25.4% in 2006. About 10 million people smoke.

Within the last five years, the production of cigarettes in Ukraine has increased by almost 50%.

Tobacco smoke, cigarette butts, packaging and wrapping and the waste from tobacco production are substantial elements in environment pollution.

## **Analysis of the tobacco-smoking problem and use of a programme approach to resolving it**

The increase in smoking prevalence is due to various factors: the mature market in tobacco products and their active marketing by tobacco producers, combined with weaknesses in national tobacco control legislation, patchy enforcement and regulations and the lack of effective enforcement of protection from tobacco smoke in public places, workplaces and educational institutions; limitations in the education system with regard to health education; the lack of training for skilled medical, pedagogical and social workers who would be able to effectively prevent the spread of smoking; inadequate information for the population about the risks and dangers of smoking; and a lack of access to antismoking medicines for the majority of tobacco users.

Tobacco advertising is forbidden on television and radio, to some extent in the print media, and near educational and some other institutions. However, marketing campaigns with prizes which encourage tobacco use have recently become more common.

The tobacco price and tax policy is not comprehensive and the excise taxes on tobacco in Ukraine are among the lowest in Europe. However, excise tax is an instrument which the government can use to influence the consumption of unhealthy commodities.

According to the survey data, two in three smokers wish to stop smoking but are not able to do so without medical treatment. According to research carried out by the Institute of Cardiology, only 12.7% of family doctors, cardiologists and other medical professionals offer some help with stopping smoking from time to time, and only 9.9% of them do it permanently. At the same time, smoking prevalence among medical professionals is rather high: 43.4% of male and 15.0% of female doctors smoke. International research has shown that physicians who smoke give considerably less assistance to smokers to help them stop smoking.

The high prevalence of smoking among teachers and other educators is a considerable barrier to the prevention of smoking in the young generation.

International experience shows that a sustained complex national policy of public health protection by means of reducing the prevalence of smoking and establishing a safe environment produces substantial positive results. However, at present Ukraine is among the few countries in Europe which still do not practise a programmed approach to resolving the problem of tobacco-smoking.

The problem of reducing the harmful impact of tobacco on public health cannot be solved merely by the Ministry of Health, because educational, social, informational, economic, legislative and other measures need to be implemented with the participation of central and local government bodies, communities and nongovernmental organizations.

The bases for the implementation of broad nationwide activities directed at reducing the harmful impact on public health of tobacco are (i) the Law "On measures to prevent and reduce the use of tobacco products and their harmful impact on public health", adopted in 2005, and (ii) the WHO Framework Convention on Tobacco Control (FCTC), ratified by Ukraine on 15 March 2006.

## **Objective of the Programme**

The objectives of this Programme are: to protect and promote public health; to protect the population against the consequences of tobacco consumption and exposure to tobacco smoke; and to minimize the social, environmental and economic consequences of tobacco use by carrying out tobacco control measures at national and local levels.

## **Choice of the best solution to the problem on the basis of comparative analysis of possible variants**

In recent years the following activities have been carried out with the aim of counteracting the problem of increasing tobacco-smoking:

- proper information for customers, especially children and young people, on the harm from tobacco products;
- medical treatment for tobacco dependence in public and private establishments;
- a gradual increase in tobacco excise tax rates;
- restrictions on tobacco advertising;
- selective enforcement of smoking bans in work- and public places but without strict punishments for violators.

The results of these activities combined with the experience of other countries demonstrate that this option not only does not resolve the tobacco problem but, on the contrary, makes it more severe.

The following set of policies offer a better option for an effective resolution of the problem:

- broad systematic prevention activities aimed at the whole population, especially at children and young people, directed at increasing awareness of the health hazards of tobacco-smoking, of the toxic constituents of tobacco smoke and methods of stopping using tobacco;
- organization of a system to provide assistance in stopping the use of tobacco and treatment of tobacco dependence, with proper training of health professionals;
- annual rises in excise tax rates on tobacco products that ensure real price increases for these products, combined with measures to eliminate all forms of illicit trade in tobacco products;
- a ban on:
  - all tobacco advertising, promotion and sponsorship
  - smoking in work- and public places.

Implementation of such a complex of measures would correspond fully with the provisions of the FCTC and would result in a substantial decrease in the prevalence of tobacco-smoking, and consequently a decrease in illnesses and deaths caused by tobacco consumption and exposure to tobacco smoke.

## **Methods of solving the problem, terms of implementing the programme**

The solution to the problem is possible by implementation of the set of policies in two stages.

During the first stage (2008–2010) it will be necessary:

- to improve the relevant legislation and regulations;
- to develop educational programmes, including postgraduate education and training, addressed to medical, pharmaceutical, social and pedagogical workers, specialists and leaders, which ensure the implementation of activities aimed at preventing and reducing tobacco-smoking and providing medical treatment for tobacco dependence;
- to include in the education and training curricula for medical, pharmaceutical, social and pedagogical workers special themes on methods of preventing and stopping the consumption of tobacco;
- to inform the population about the health risks of tobacco consumption and exposure to tobacco smoke, the adverse economic and environmental consequences, the toxic constituents of tobacco products and the emissions they may produce, and the benefits of stopping using tobacco and a tobacco-free lifestyle;
- to develop a coordination mechanism for ministries and other government bodies for the prevention of tobacco-smoking among the whole population, especially among children and young people, and to increase awareness about the harmful impact of tobacco on health;
- to ensure the conduct of activities for diagnosing, preventing and treating tobacco dependence with adequate counselling;
- to educate health professionals employed in all kinds of health care facility about ways to provide adequate medical treatment to those who wish to stop using tobacco products, and to develop and introduce into everyday practice standards for activities aimed at preventing and stopping the use of tobacco.

During the second stage (2010–2012) it is planned:

- to establish a national system of monitoring and epidemiological surveillance of tobacco consumption;
- to introduce a system of medical registration of information on the smoking status of every client of every kind of health protection services;
- to carry out research concerning the prevention of and reduction in the use of tobacco products and medical treatment of tobacco dependence;
- to ensure participation, in cooperation with the proper international organizations, on issues relating to the control and elimination of the illicit trade in tobacco products and on implementation of joint activities for preventing and controlling the use of tobacco.

## **Expected results of the implementation of the Programme and its evaluation**

Implementation of the Programme will result in:

- a reduction in the consumption of tobacco products and the prevalence of tobacco-smoking;
- an increase in public awareness of the adverse effects on health of tobacco-smoking;
- a reduction in demand for tobacco products;
- an improvement in standards of medical treatment for tobacco dependence, which should double the number of smokers who stop smoking for good;
- a reduction in the illicit trade in tobacco products;
- a reduction in the incidence of diseases and deaths related to tobacco consumption and/or exposure to tobacco smoke;
- an increase in life expectancy;
- a reduction in rates of involuntary exposure to tobacco smoke;
- an increase in revenues to the governmental budget from higher excise tax rates on tobacco products.

The Programme includes the establishment of a system to monitor the resolution of the tobacco problem using the expertise of other countries.

Following a stabilization in the epidemic situation, it is expected that government expenses for the medical treatment of tobacco-related diseases would be reduced.

## **Estimate of financial, technical and human resources needed to implement the Programme**

Financing of the Programme is to be carried out within the limits of the charges foreseen in the national budget, in the budgets of the Autonomous Republic of Crimea, the regions and the cities of Kiev and Sevastopol, and also other sources.

The amount of financing for the Programme from the national budget, the budgets of the Autonomous Republic of Crimea, the regions and the cities of Kiev and Sevastopol will be determined annually, taking into account the exact tasks and real possibilities.

The Programme's activities will be coordinated and monitored by institutions of the Ministry of Health.

International sources of research, technical and financial assistance and expertise will also be used in the implementation of the Programme's activities, in line with the provisions of the FCTC.

*Annex 3*

**DRAFT OF A MODEL RESOLUTION FOR LOCAL AUTHORITIES ON THE  
REGULATION OF TOBACCO-SMOKING WITHIN THEIR ADMINISTRATIVE  
AREAS**

Prepared by the coalition of nongovernmental organizations “For a Tobacco-Free Ukraine” on the basis of the relevant resolutions of the city councils of Aloushta, Cherkassy, Kherson and Lutsk.

**RESOLUTION**

Date

No.

**On the regulation of tobacco-smoking and reduction of the harmful impact of tobacco-smoking on public health within the territory of *CITY*.**

In the interests of the territorial community of *CITY*, in accordance with Articles 27 and 50 of the Constitution of Ukraine; Article 17, item 1.44 and 1.46 of Article 26, item 1 paragraph “a” Article 30; paragraph 1 item “a” of Article 32; Article 40 of the Law of Ukraine “On local self-government”; Articles 9 and 13 of the Law of Ukraine “On measures to prevent and reduce the use of tobacco products and their harmful impact on public health” and with the purpose of providing protection to people from the harmful impact of tobacco smoke at work- and public places, the *CITY* council

**DECIDED:**

1. To establish that the following places in *CITY* are smoke-free, and the smoking of tobacco products is banned there:

1.1. children’s establishments, children’s playgrounds, recreation places for children (including game and computer clubs, cinemas) and surrounding areas; public transport stops and for 50 meters around them; lifts, staircases and entrances of multistory dwelling-houses; telephones; churches and the 50-meter area around them;

1.2. educational, health, cultural, physical activity and sport establishments of various ownership; office premises of businesses, establishments and organizations that employ workers; trade establishments (including shopping centres, booths, markets, fairs, wholesale and small wholesale warehouses, shops); recreation areas (including parks, beaches, public gardens); indoor and open sporting facilities; government administration and local government buildings.

2. To direct that the places mentioned in item 1.2 must be either equipped with separately located and isolated places for smoking, or be recognized as totally smoke-free.
3. To request the directors of private, communal and governmental enterprises, establishments and organizations, owners or tenants of the relevant buildings and premises to:
  - 3.1. establish before (*date*) special, separately located and isolated places for smoking, equipped with drawing ventilation or other facilities for dilution of tobacco smoke, and place visible information about the location of such places and about the harm to human health from tobacco-smoking, or to define the building such as totally smoke free.
  - 3.2. adopt amendments to the internal labour rules regarding limitations on the use of tobacco and disciplinary responsibility for violations within a month of the official publication of the given resolution;
  - 3.3. pay attention to the personal responsibility of the directors regarding the enforcement of the provision of the Law “On measures to prevent and reduce the use of tobacco products and their harmful impact on the health of the population” and the given resolution;
  - 3.4. inform before (*date*) the *CITY* council about the implementation of the given resolution.
4. To impose the following fines for violation of this resolution, as for violation of the Rules of good administration of city territories: for public servants, directors of enterprises, establishments, organizations – from Hrv 51 to Hrv 119 (in obedience to article 152 of the Code of Ukraine on Administrative Offences).
5. To recommend the law enforcement authorities to strengthen control and call to account persons who offend under article 175–1 of the Code of Ukraine on Administrative Offences (*on fines for those who smoke in places where smoking is forbidden*).
6. To entitle members of nongovernmental organizations responsible for guarding public peace *NAMES* to draw up a report on offences defined by the Code of Ukraine on Administrative Offences Article 175–1 (in accordance with Article 255 paragraph 2 item 9 of the Code).
7. To charge the legal department of *CITY* council to develop, in line with provisions of the legislation of Ukraine, and to present for adoption at the session of the City council executive committee:
  - a resolution “On determination of structural subdivisions whose public servants are entitled to draw up reports on administrative offences in obedience to the resolution of *CITY* council **“On the regulation of tobacco-smoking and reduction of the harmful impact of tobacco-smoking on public health within the territory of *CITY*”**”;
  - provisions on the application of the Code of Ukraine on Administrative Offences Article 175–1 on “The smoking of tobacco products in forbidden places”; on Article 152 of the Code on “Violation of rules of good administration of cities and the geographical areas of other settlements” and Article 156 of the Code on “Violation of rules of trade in alcohol and tobacco products”, with designation of persons entitled to draw up reports on

these administrative offences and on these reports for consideration at sessions of the administrative commission of *CITY* council.

8. To include, when buildings are reconstructed and when drafts are being prepared of *CITY* council resolutions about non-objection to the location of the buildings, an item about the equipment of the separately located places for smoking or about defining these buildings as totally smoke-free.

9. When preparing drafts of *CITY* council resolutions on concordance of locations of public meals establishments to foresee either defining them as totally smoke free, or introduction of obligatory division of restaurants, cafes, bars, night-clubs area on two parts, where non-smoking zone should exceed 50% of total areas for all visitors and non-smoking zone is placed in a way for tobacco smoke not to penetrate into this zone.

10. To charge the departments and managements of the *CITY* council when preparing or changing “Statutes on managements’ and departments’ activities” to include an item on drawing up reports on administrative offences according to the city council resolution “**On the regulation of tobacco-smoking and reduction of the harmful impact of tobacco-smoking on public health within the territory of *CITY*”**”.

11. To charge the health protection department of *CITY* council (*person responsible*) to open before (*date*) clinics for the medical treatment of tobacco dependence within the city’s polyclinics and to train the proper specialists.

12. To publish the given resolution in the mass media.

13. To put the resolution into effect from the day of its official publication in newspaper (*name*).

14. To entrust control over implementation of the given resolution to (*person*).

## *Annex 4*

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#### **1. Public health importance of tobacco and need to solve the problems**

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