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Tobacco control in central and eastern Europe



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Global burden of disease in Europe. Representative map of table 1.
Blue: very low child and adult mortality; orange: low child and adult mortality; grey: low child and high adult mortality.

Educational aims

- › To present the current epidemiological situation in central and eastern Europe.
- › To describe smoking prevalence and disease burden in central and eastern Europe.
- › To detail the tobacco-control strategies applied.

Summary

The problems caused by high smoking rates in the countries of central and eastern Europe were compounded following the fall of Communism. Centralised health services deteriorated, and populations new to consumerism were faced with aggressive tobacco marketing. Now, thanks to domestic and international initiatives, these nations are beginning to make progress in combating the tobacco pandemic.

After the Second World War, many countries in central and eastern Europe (CEE) became satellite states of the Soviet Union, in which socialist regimes were introduced by force. Communist domination and relative poverty generated a widespread longing for freedom and the Western lifestyle.

After the rise of the Solidarity movement in Poland and the destruction of the Berlin wall in 1989, these countries became independent and started to introduce new political systems and market economies, causing enormous and rapid changes in their societies. This transition also led to some unwanted

Key points

- › The current epidemiological situation in central and eastern Europe reflects the historical, political and economic diversity of the transition from Communism.
- › Tobacco control measures have been adopted with success in some countries thanks to strong leadership, participation in international programmes, wide collaboration with leading tobacco control organisations and the introduction of comprehensive legislation.

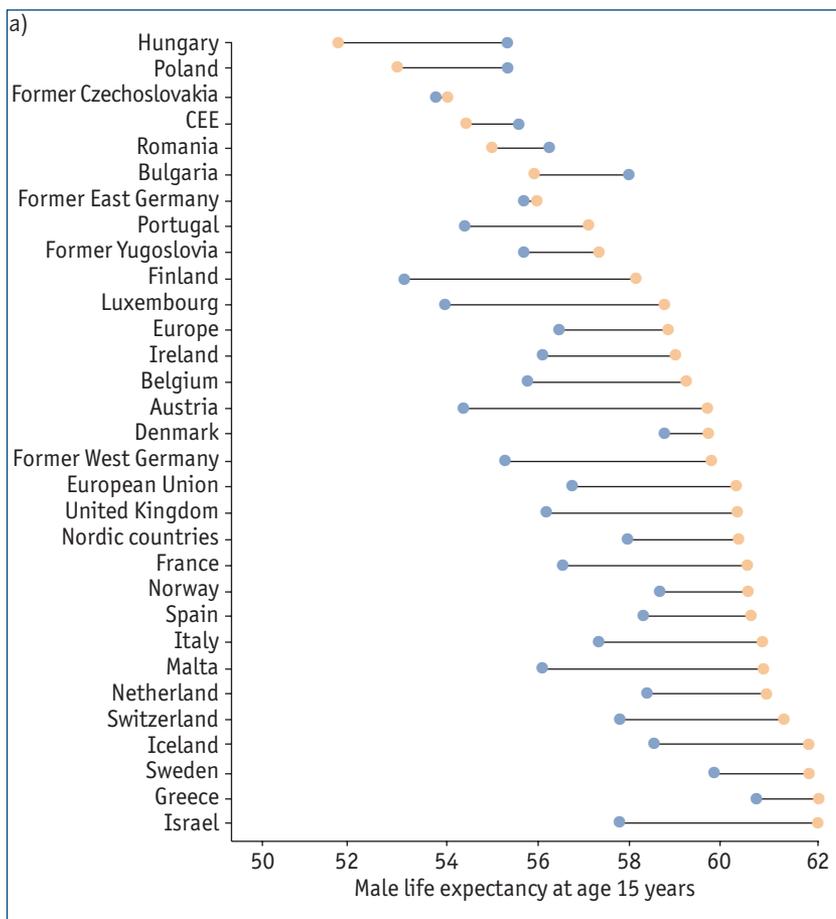
deterioration in previously centrally managed health systems, leading to increases in the incidence of communicable diseases, shortened life expectancy and other problems.

Of the 10 countries that joined the European Union (EU) in 2004, eight were former socialist states from CEE.

For men in CEE, tobacco smoking was a social norm, with Poland and Hungary leading the world in *per capita* consumption. Smoking also became an accepted habit among women, especially in central Europe. The transition from socialism and the privatisation of state-owned tobacco monopolies led to an influx of investment from transnational tobacco companies, whose aggressive marketing policies had not been encountered previously.

Public health physicians and tobacco control activists in CEE countries became aware of the dangers of the tobacco pandemic in the early 1990s, and began to build national and international coalitions to control it. Poland introduced comprehensive anti-tobacco legislation in 1995, and was followed by other countries.

Figure 1
Life expectancy of a) males and b) females at age 15 in Europe in 1970 (blue circles) and 1991 or the latest available year (orange circles). Figure modified from Bobak M, Marmot M. East-West mortality divide and its potential explanations: proposed research agenda. *BMJ* 1996; 312: 421–425, with permission from the publisher.



The epidemiological situation

In the early 1990s, male and female life expectancy in the former Soviet satellite regimes was the lowest in Europe. Among males, life expectancy tended to be lower than it had been in 1970 (figures 1 and 2). In the mid-1980s, males' risk of dying in middle age was 50%, with up to half of this risk attributable to tobacco smoking.

The incidence of lung cancer among males in CEE is the highest in Europe and male mortality from lung cancer is higher than the EU average. Lung cancer mortality, particularly in middle age, showed an increasing trend in males up to 1995, levelling off thereafter. Among females, the trend is still upward, surpassing the lung cancer mortality rates of western Europe.

Smoking prevalence in CEE

Tobacco smoking is one of the leading causes of disease burden in Europe. In western Europe, 40–50% of younger males currently smoke, as do 30–40% of those aged >45 years. Among females, smoking prevalence is higher in northern European countries than in southern ones. In countries that were formerly part of the Soviet Union, smoking prevalence among males is very high (>50%), but only ~10–15% of females smoke. Adolescent smoking rates are higher in CEE than in western Europe and the USA, especially in males.

Model of a tobacco epidemic

It is now accepted that the burdens of disease and mortality lag several decades behind actual tobacco exposure: in some countries, mortality due to tobacco is low despite high tobacco consumption; in others, where tobacco consumption is decreasing, mortality is increasing; whereas in those with long-standing tobacco control measures, mortality has decreased only after 20 years of curbing cigarette consumption. If current trends in tobacco consumption do not change, we may predict that, worldwide, there will be 10 million tobacco-related deaths per year in 2020–2030.

Burden of tobacco-related diseases

Countries in Europe can be divided into three (A, B, C) strata according to child and adult mortality (table 1 and map). Most of the CEE countries belong to the less favourable groups. The prevalent causes of mortality (vascular, cancers and noncommunicable) are tobacco-related and they are definitely higher in Europe B and C, in both sexes, in individuals aged >45 years. In Europe C, tobacco is also a leading risk factor for disability.

Tobacco-control strategies

In 2003, the first worldwide political tobacco-control treaty, the Framework Convention on Tobacco Control (FCTC), was endorsed unanimously by the 192 (at the time) member states of the World Health Organization (WHO). The FCTC enables each country to introduce several measures to decrease the health threat posed by tobacco, and is designed to strengthen national and international cooperation to combat the tobacco pandemic. The proposed strategies are:

- > bans on tobacco advertising and promotion
- > strong requirements on packaging and health warnings
- > clean indoor air control
- > implementation of legislation on taxation of tobacco products and price policy
- > regulations on emission and content of tobacco products
- > measures to combat tobacco smuggling.

The FCTC helps to develop national capacity in tobacco control, proposing to build country-specific evidence (health statistics, tobacco control economics, cessation methods and evaluation of tobacco-control measures) and infrastructure (training and education programmes, provision of technical, scientific and legal help, material, equipment and supplies), emphasising the need for government support of tracking and surveillance systems, interventions aimed at healthcare systems and coalition building between officials and nongovernmental organisations.

There are several barriers to the implementation of the FCTC propositions, one being a lack of locally relevant evidence, accompanied by

inadequate expertise in the research areas. To overcome these barriers, the Global Tobacco Surveillance System has been developed by the WHO, the US Centres for Disease Control and Prevention and the Canadian Public Health Association to facilitate data collection using common research and data management procedures. Three surveys were proposed, acquiring data on youth, teachers and health professionals.

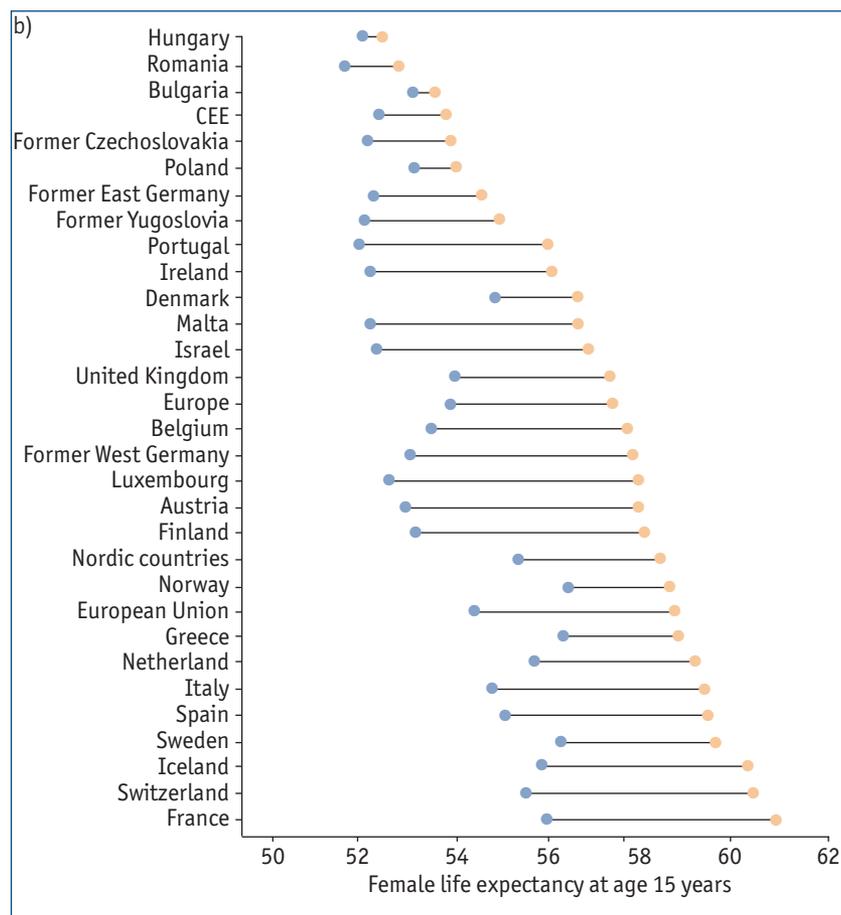


Table 1 Global burden of disease subregions in Europe

Mortality stratum	Countries
A Very low child; very low adult	Andorra, Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland, UK
B Low child; low adult	Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Georgia, Kyrgyzstan, Macedonia, Poland, Romania, Slovakia, Tajikistan, Turkmenistan, Uzbekistan, Yugoslavia#, Turkey
C Low child; high adult	Belarus, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Russian Federation, Ukraine

#: since divided into Serbia and Montenegro. Modified from Powles JP, Zatoński W, Hoorn SV, Ezzati M. The contribution of leading diseases and risk factors to excess losses of healthy life in eastern Europe: burden of disease study. *BMC Public Health* 2005; 5: 116–125, with permission, under the terms of the Creative Commons Attribution Licence.

BOX. The World Bank list of effective tobacco control interventions

- > Price increases through higher taxes on cigarettes and other tobacco products
- > Bans/restrictions on smoking in public and work places
- > Better consumer information, including public information campaigns, media coverage and publicising research findings
- > Comprehensive bans on the advertising and promotion of all tobacco products, logos and brand names
- > Large, direct health warning labels on cigarette boxes and other tobacco products
- > Treatment to help dependent smokers stop, including increased access to medications

CEE countries have been active participants in the development and application of this system. The results of the survey on adolescents were published recently, demonstrating a smoking prevalence of 45% in the European region. This is the second highest rate in the world, after the Americas region.

Experts from CEE have participated in the development of WHO Europe recommendations on the treatment of tobacco dependence, encompassing recommendations for brief advice, cessation specialists, pharmacotherapy, special group interventions and healthcare system purchasers.

The active involvement of Poland in national and international anti-tobacco activities has resulted in a strong anti-tobacco climate, as assessed in a barometer study by FAGERSTRÖM *et al.* (2001).

In a recent study, the application of six strategies to control tobacco proposed by the World Bank as the most effective (pricing policies, bans on smoking in public places, better information

of the consumer, bans on advertising and promotion, health warnings, and treatment of dependent smokers) enabled leading experts from European countries to construct a tobacco-control scale with a scoring system for each strategy (box). When compared with the EU as a whole, CEE countries ranked in the middle for pricing policies; lower for smoke-free public places policy (with the exception of Poland); very low in government spending on public information campaigns; and satisfactorily in advertising ban policy, health warnings and treatment of dependent smokers.

Conclusion

It seems that in CEE countries with long-term traditions of anti-smoking activities, active participation in national and international coalitions, is likely to result in considerable success in combating the tobacco pandemic.

Suggested further reading

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