

THE GERMAN TOBACCO ATLAS

How to communicate TOBACCO or HEALTH to the public and to policy-makers



GERMAN
CANCER RESEARCH CENTER

Dipl. Biol. Sarah Kahnert

The German Tobacco Atlas "Tabakatlas Deutschland 2009" is an illustrative educational handbook on the social and health aspects related to tobacco use, its consequences and tobacco control measures in Germany. It was released mid-2009 by the German Cancer Research Center (DKFZ) and the German Federal Ministry of Health.

Aim:

The manual easily conveys knowledge, facts and figures on the subject of tobacco to media, decision-makers and the public by using mainly self-explanatory illustrations. Thus, barely understandable statistical data are readily assessable even for laymen. Using graphs and maps, the publication provides a wealth of information by combining brief text and illustrations.

Contents:

The Atlas consists of six chapters which cover the topics

- tobacco products (Chapter 1), including additives, toxicity of tobacco smoke and harm reduction, as well as health and environmental aspects during their manufacturing;
- tobacco consumption and health consequences (Chapter 2), implying health effects and epidemiology of smoking;
- passive smoking and health consequences (Chapter 3),
 implying health effects and epidemiology of passive smoking:
- implying health effects and epidemiology of passive smoking;
 economic aspects of smoking (Chapter 4), analyzing costs of smoking for individuals, for the economy and the health
- tobacco industry (Chapter 5), addressing growing, trade and distribution of tobacco and tobacco products; and
- tobacco control policy (Chapter 6), showing to what extent the WHO Framework Convention on Tobacco Control (FCTC) is implemented in Germany and other European countries.

Implementation:

Due to its illustrative presentation the German Tobacco Atlas is an example on how to communicate health issues effectively in an attractive manner. It constitutes a reference book for policy-makers and those responsible in public health institutions, journalists, health professionals, students and for all other interested in tobacco and tobacco control.

With a circulation of 5,000 copies it can be purchased in bookstores but is also freely available on the website of the German Cancer Research Center.

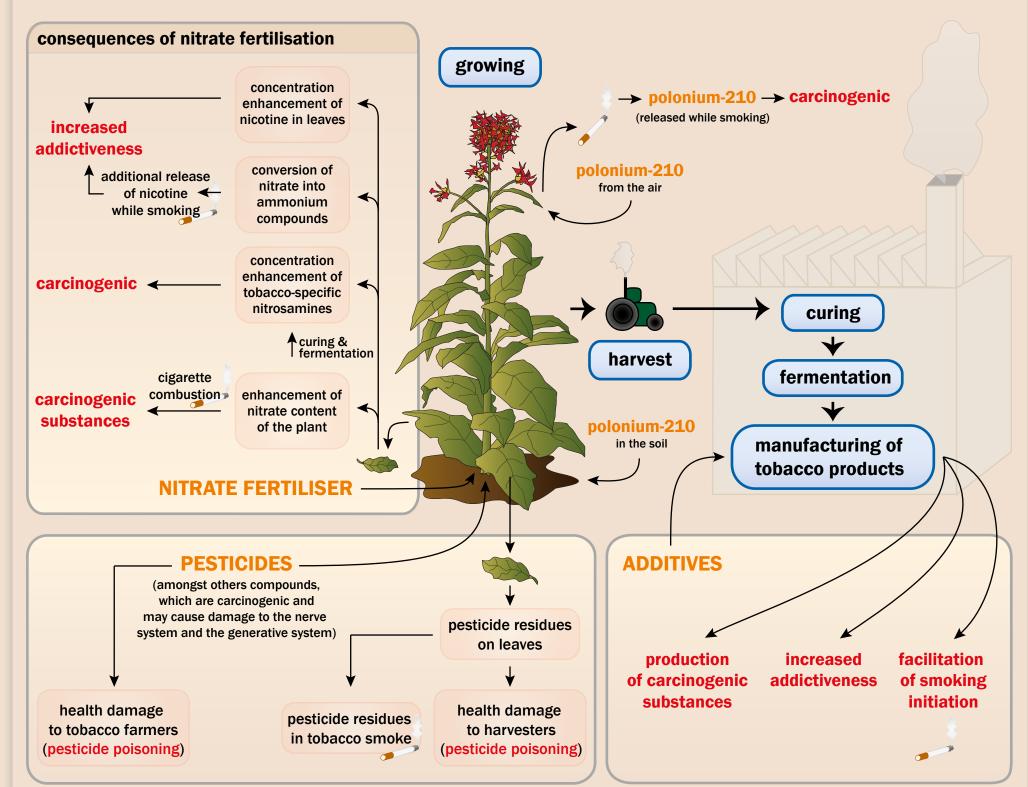
Following examples from the chapters of the "Tabakatlas Deutschland 2009" should reveal how to illustrate certain contents in a simple, clear and demonstrative way. Therefore, selected impressive figures and the most important text contents have been translated.

1 Tobacco products

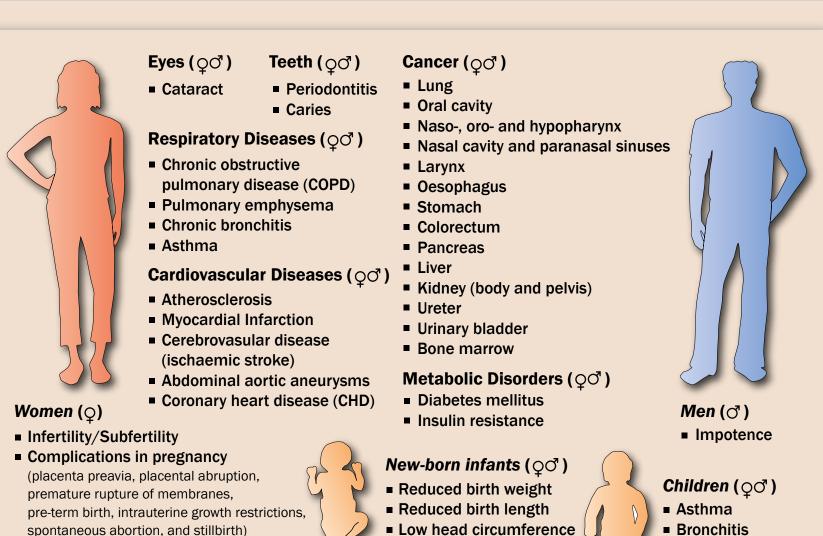
In the manufacturing of tobacco products, both in growing and in the processing of tobacco (curing, fermentation, tobacco production), many substances are used that increase addictiveness and adverse health effects of tobacco products.

More than 600 different additives are allowed to be used in the manufacturing of tobacco products. Additives make up about 10 % of the total weight of a product. The most commonly used additives include sugar, menthol, liquorice and cocoa.

During combustion of tobacco and the additives contained, a wide variety of carcinogenic combustion products as well as carbon dioxide, nitrogen oxides and sulfur dioxide are formed. Therefore, tobacco smoke is a complex mixture of more than 4,800 different substances, of which at least 250 are toxic.



Tobacco consumption and health consequences



Growth impairment

Cleft lip and palate

syndrome (SIDS)

Sudden infant death

Figure Health consequences caused by smoking
Tobacco smoke contains many pollutants that are
absorbed quickly and efficiently when inhaled through
the lungs. Smoking harms nearly every organ of the
body. Together with the inhaled smoke, about 1 to 2 mg
of nicotine enters the blood circulation. Nicotine affects
many systemic processes and may cause addiction

within a short period.

In Germany, within the adult population aged over 25 years, smoking prevalence among men declined. In recent years, even among women a significant decline is evident. Overall, almost one third of the adult population is still smoking.

Since 2001, a continuous decline in smoking prevalence is observed among the 12- to 17-year-olds. At the same time, the proportion of adolescent never-smokers has increased significantly.

Passive smoking and health consequences

Second hand smoke contains the same toxic and carcinogenic substances as the smoke inhaled by the smoker. Therefore, passive smoking also causes numerous, sometimes severe diseases. Overall in Germany, more than 3,300 non-smokers die every year due to passive smoking.

FIGURE Passive smoking in children and adolescents

Despite the improvement of the non-smoking legislation, a significant number of people both at work and at leisure are still affected by passive smoking. This also concerns children and adolescents: Among the 11 to 17-year-olds, between 22 % and 64 % are exposed to tobacco smoke several times a week or even daily.

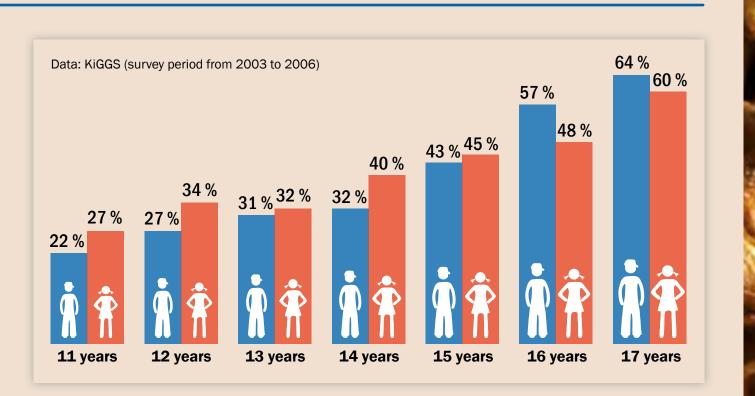


Figure Smoking-related deaths in women and men (data from 2007)

Osteoporosis (post-menopausal)

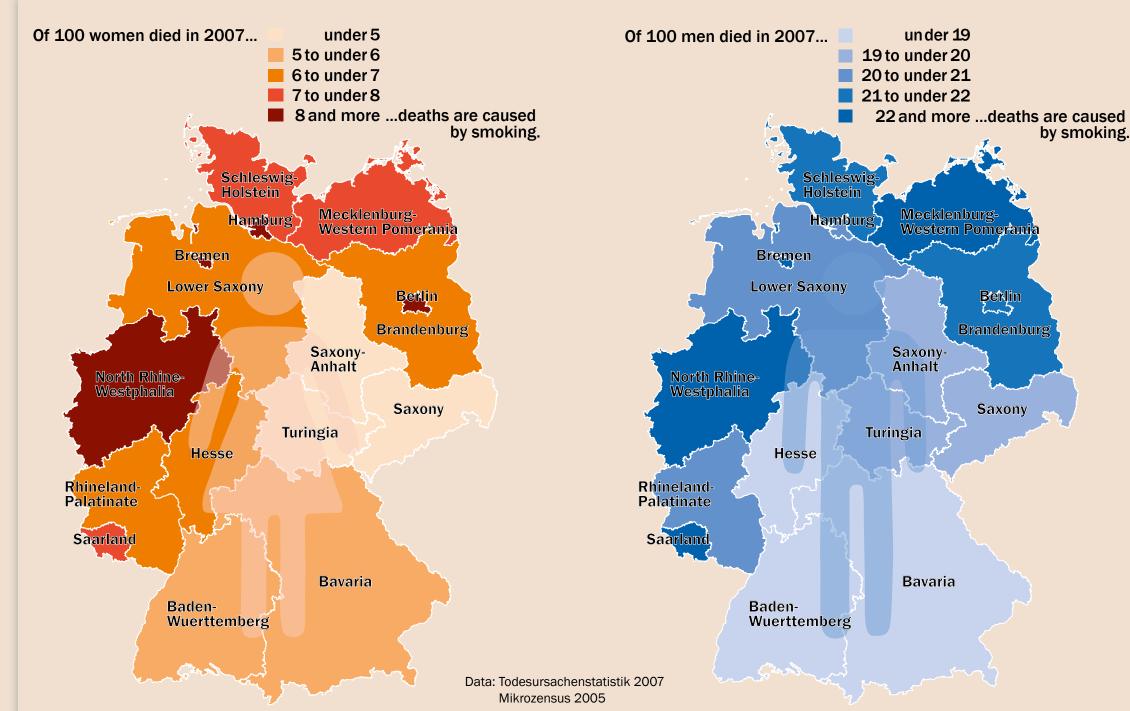
Cancer of the ovary (mucinous)

Cancer of uterine cervix

Breast cancer

Comparing federal states, the proportions of smokers in men and by tendency also in women are lower in the south than in the north. Therefore, there are more smokers living and more people dying in northern Germany as a consequence of tobacco use.

The proportions of smokers also differ substantially by social characteristics: Both in adolescents and adults with low socioeconomic status, the smoking prevalence is significantly higher than in those with high socioeconomic status.



Acute respiratory

Hepatoblastoma

Childhood obesity

disease

4

Economic aspects of smoking

In Germany, in 2008, nearly 22.5 billion euro were spent on tobacco products. In 2003, households spent on average 6.5 % of their monthly income on tobacco products. The lower the income, the greater the relative proportion that is spent on tobacco products.

Figure What you could afford if you stopped smoking...



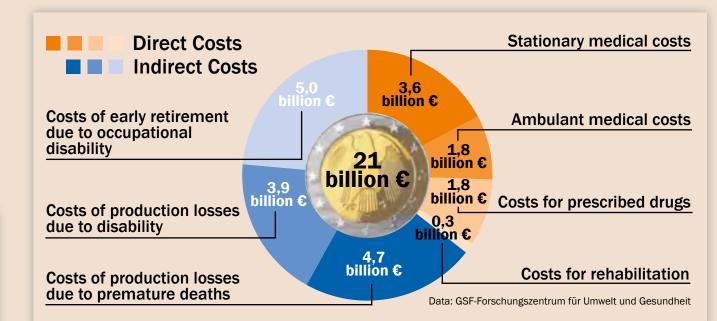


Figure Direct and indirect tobacco-related costs (data from 2003)
The economic costs due to smoking are estimated at 21 billion euro.
Of these, about one-third (7.5 billion €) are direct health care costs due to tobacco-related illnesses and two-thirds (13.5 billion €) are indirect costs due to loss of production and early retirement.

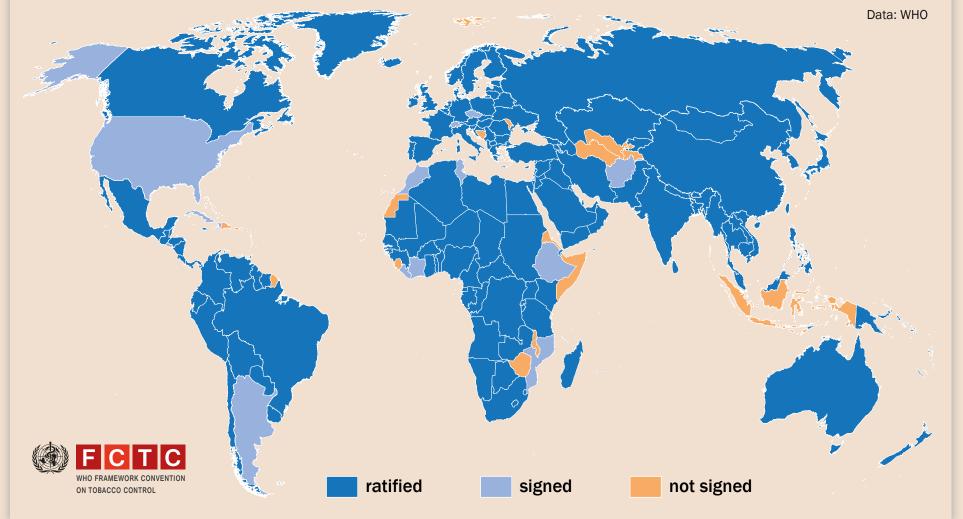
In the past 10 years, German tobacco tax has been increased several times. Despite declines in consumption, tax revenues of the federation were therefore relatively stable from 13.5 to 14.4 billion euro.

6 Tobacco control policy

The Framework Convention on Tobacco Control (FCTC) is the first intergovernmental agreement on health, which was negotiated under the auspices of the World Health Organization (WHO). The objective of the FCTC is to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco use and secondhand smoke. On 27 February 2005, the Framework Convention came into force.

FIGURE FCTC contracting parties (at the time of 1st April 2009)

Until April 2009, 167 States and the EU as a multi-state entity have signed the agreement. Of these, 164 countries ratified the FCTC and therefore are member states.





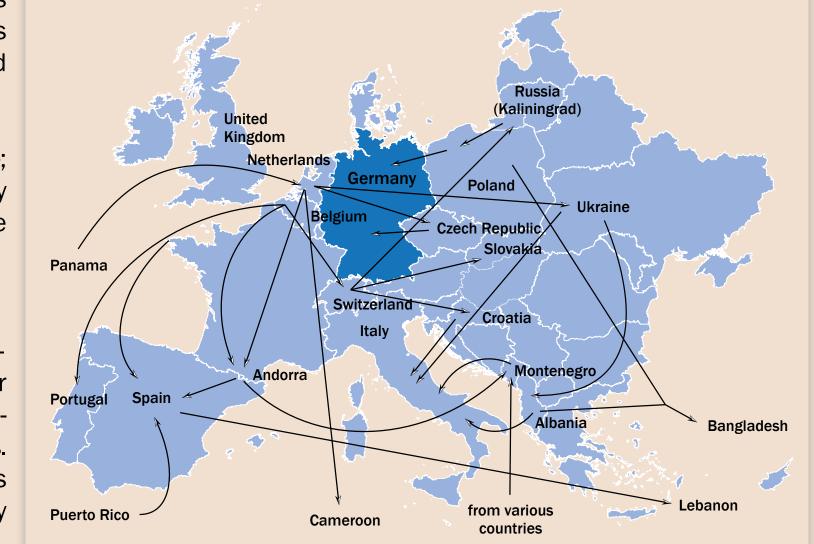
Tobacco Industry

From tobacco growing to tobacco consumption numerous ecological, economic and health problems arise – examples are overfertilisation, economic dependency of farmers and damage to health due to massive use of pesticides.

In Germany, tobacco growing plays a minor role in agriculture; the majority of the processed tobacco is imported. Germany is the second largest importer of raw tobacco and one of the major cigarette exporters worldwide.

FIGURE Smuggling routes of cigarettes in Europe

Worldwide, billions of cigarettes are smuggled annually – cigarettes are likely to be the most widely smuggled consumer goods in the world. The illegal trade of cigarettes causes considerable health, economic, constitutional and fiscal damages. There are numerous indications that the tobacco industry has used this illegal form of distribution intentionally since not only smugglers but also manufacturers profit from those illegal sales.



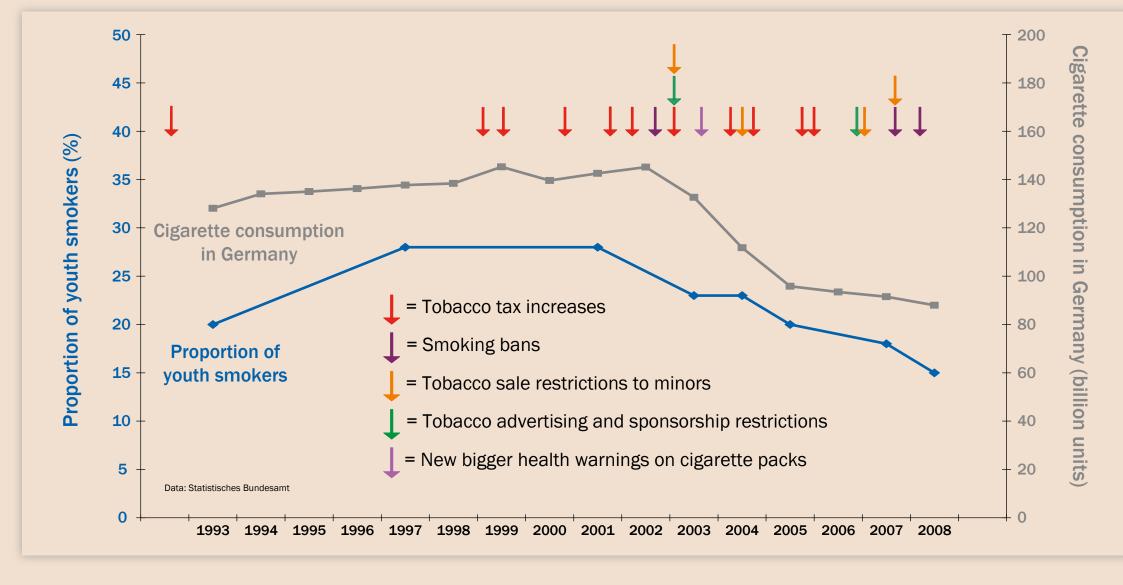


FIGURE Tobacco prevention strategies and their effects in Germany

In recent years, Germany has succeeded in reducing tobacco consumption by enacting several tobacco control policies. This trend must be consolidated and continued further to prevent the onset of tobacco use, to support smoking cessation and to protect from secondhand smoke. For this purpose the FCTC provides a variety of strategies which have to be implemented.



Poster presentation Dipl. Biol. Sarah Kahnert
Unit Cancer Prevention and
WHO Collaborating Centre for Tobacco Control
Head Dr. Martina Pötschke-Langer

German Cancer Research Center
Deutsches Krebsforschungszentrum (DKFZ)
Im Neuenheimer Feld 280
D-69120 Heidelberg

Phone: +49 (0) 62 21 42 30 13 Fax: +49 (0) 62 21 42 30 20 Email: s.kahnert@dkfz.de Web: www.tabakkontrolle.de