



Wissenschaftliche Highlights der GSF 2007 Abfrage April 2007

Institut / Selbst. Abteilung / KKG / Nachwuchsgruppe:

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Titel des Highlights:

Change in smoking-attributable morbidity, mortality and costs in Germany between 1993 and 2003

Keywords:

Smoking, economics, costs, morbidity, mortality

Kernaussage des Highlights in einem Satz:

Despite several tobacco control measures, the total health and economic impact of cigarette smoking continues to remain high in Germany.

Darstellung des Highlights:

Despite various efforts to curb tobacco consumption about one third of the German population still are smokers. Smoking is not only damaging human health, but a substantial economic burden for the society, as well. To calculate cigarette smoking-attributable morbidity, mortality and cost-of-illness in Germany in 2003 we used an improved version of an earlier model which had produced the figures for 1993. Costs of cigarette smoking could thus be directly compared between 1993 and 2003.

In 2003, about 115.000 deaths and 1.6 million years of potential life lost (YPLL) can be attributed to cigarette smoking. The total smoking-attributable costs added up to €21 billion, of which 35.6% were direct and the remaining 64.4% were indirect. Direct costs include costs for inpatient and outpatient care, rehabilitation as well as prescribed drugs. Indirect costs are the productivity loss due to morbidity and premature deaths. Cardiovascular diseases were the main cost driver, accounting for half of the direct costs, followed by respiratory diseases and neoplasms. In contrast with direct costs, the main driver of indirect costs was neoplasms.

Compared to 1993, the proportion of cigarette smoking-attributable deaths to all deaths remained stable, whereas the number of YPLL was 5.1% higher. Smoking-attributable female deaths rose by about 45.3% between 1993 and 2003, which can be mainly explained by using a different data source for smoking prevalence. Up to now, especially female smoking-attributable mortality was underestimated. In contrast, smoking-attributable male

deaths decreased by 13.7%. This development is linked to a decrease in relative risks of cardiovascular diseases and fewer overall deaths compared with those in 1993. Real direct costs related to cigarette smoking increased by 35.8% during this decade. Indirect costs decreased by 7.1%, because smoking-attributable deaths in employable ages decreased. This study is the first which analyzed changes in smoking-attributable morbidity and mortality over a period of 10 years.

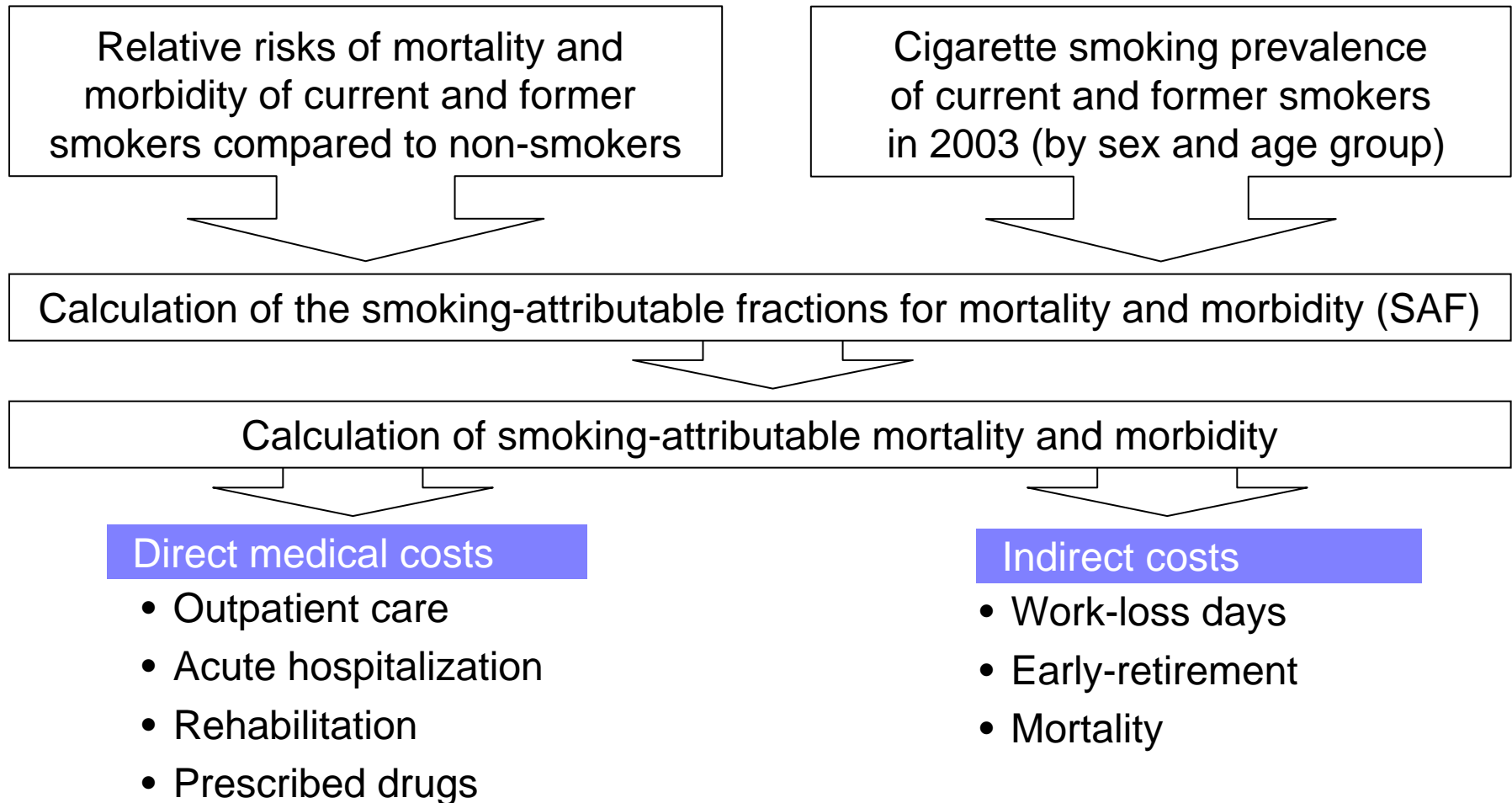
Sources:

Neubauer, S, Welte, R, Beiche, A, et al. (2006). Mortality, morbidity and costs attributable to smoking in Germany: update and a 10-year comparison. Tob Control. 15 (6), p. 464-471.
Welte, R, König, H-H and Leidl, R (2000). Tobacco - The costs of health damage and productivity losses attributable to cigarette smoking in Germany. European Journal of Public Health. 10 (1), p. 31-38.

Bezug zur GSF-Strategie:

GSF-interne Kooperationspartner, mit denen das Highlight ggf. erarbeitet wurde:

Calculating morbidity, mortality and costs related to cigarette smoking

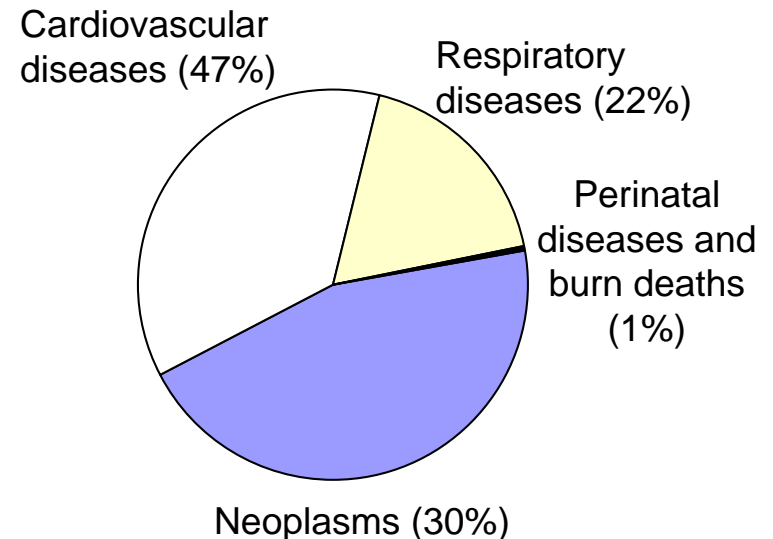
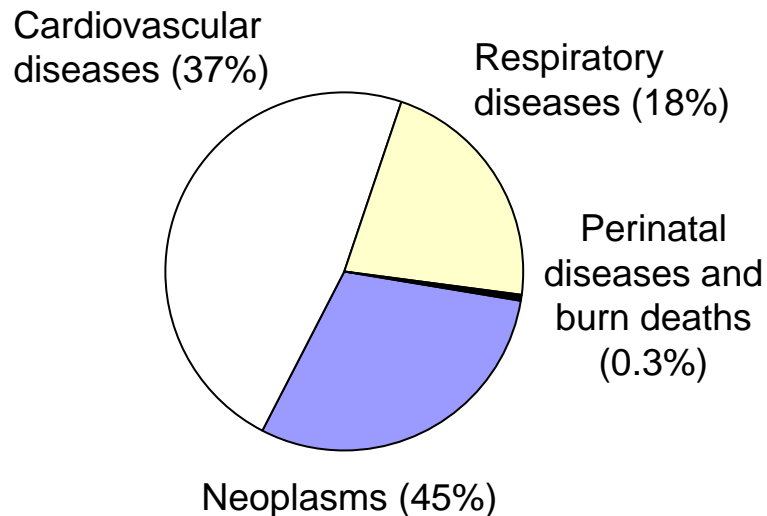


Cigarette smoking-attributable mortality in Germany 2003

114,647 cigarette smoking-attributable deaths

Males:
80,024

Females:
34,623



1.6 million years of potential life lost (294,000 below 65 years)

Smoking-attributable costs in Germany in 2003

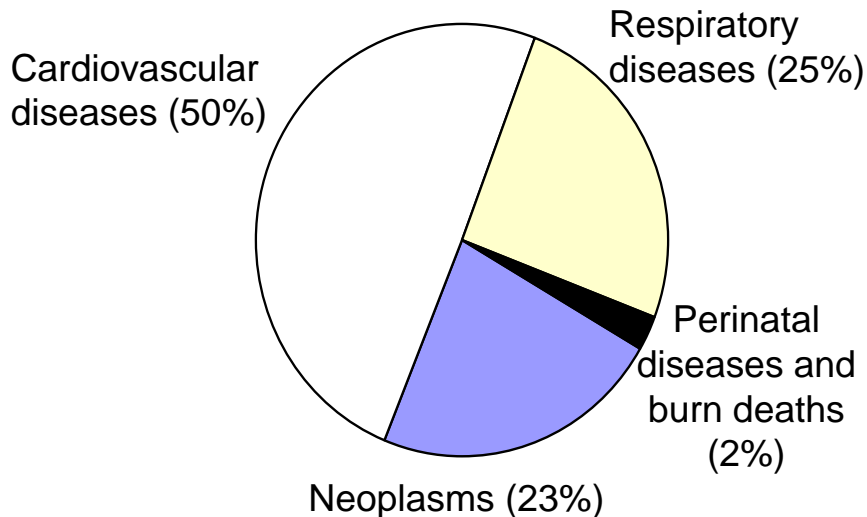
in Million €

Health care costs	7,480
Outpatient Care	1,769
Acute Hospitalization	3,606
Rehabilitation	300
Prescribed Drugs	1,805
Productivity loss	13,545
Work-loss days	3,892
Early retirement	4,952
Mortality	4,701
Total costs	21,025

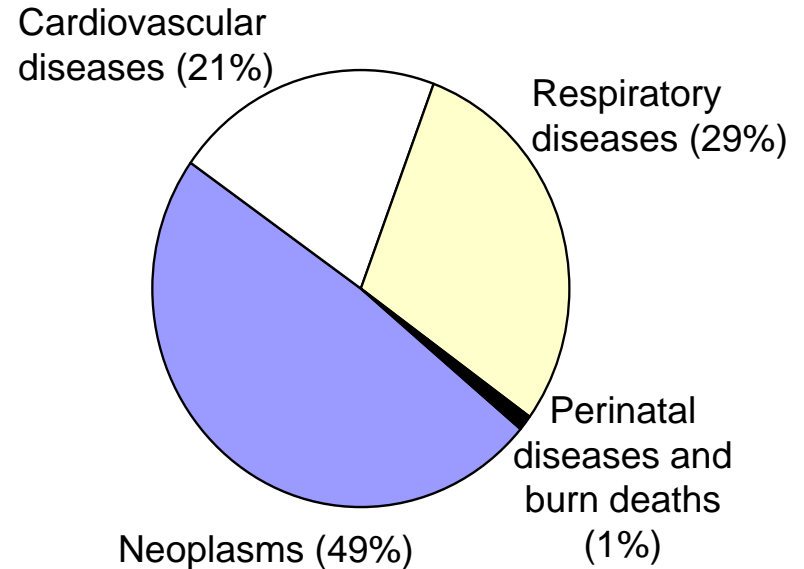
Cigarette smoking-attributable costs in Germany 2003

Total cigarette smoking-attributable costs: 21 billion €

Health care costs:
7.5 billion €



Productivity loss:
13.5 billion €



Change in cigarette smoking-attributable mortality and costs (1993-2003)

