

# The cost of smoking to the NHS

## Background

Cigarette smoking in England is responsible for nearly one in six deaths of adults aged 35 and over. Lives cut short are the worst manifestation. Years of mild to severely debilitating ill-health, the trauma of associated medical procedures and dependence on powerful medication is the experience of many smokers. Whether in quality of life or financial impact on the NHS the cost of smoking represents something which could be better spent.

As part of a review of the progress ten years on from 'Smoking Kills' we consider the cost to the NHS of smoking in England. Costs of hospital admissions, outpatient visits, GP and practice nurse consultations and prescriptions are taken into account. Current costs are estimated and also costs that might have pertained had there been no reduction in smoking prevalence.

## Method

Current and ex-smokers' health service use is compared with that of never smokers and the excess attributed to smoking. Relative risks and smoking prevalence for current and ex-smokers together produce an estimate of the proportion attributable to smoking. This proportion is then applied to the total number of hospital admissions etc, yielding an estimate of the number attributable to smoking. The cost to the NHS is then obtained by multiplying the attributable number by an estimate of unit cost.

Hospital admission estimates are derived from 2006-07 Hospital Episode Statistics (HES) day admissions and bed-days data. Estimates are by disease, built up from separate figures for men and women by age, and unit costs are derived from NHS reference costs. Relative risks are in the main from the Cancer Prevention Study II, supplemented for non-fatal diseases from other sources.

Other costs utilise regression (negative binomial) based relative risk estimates derived from individual reported service use in the 2006 General Household Survey. Totals and unit costs are derived from a range of external sources.

## Total Costs:

Smoking cost the NHS £2.7 billion in 2006/07; more than £50 million each week spent treating diseases caused by smoking.

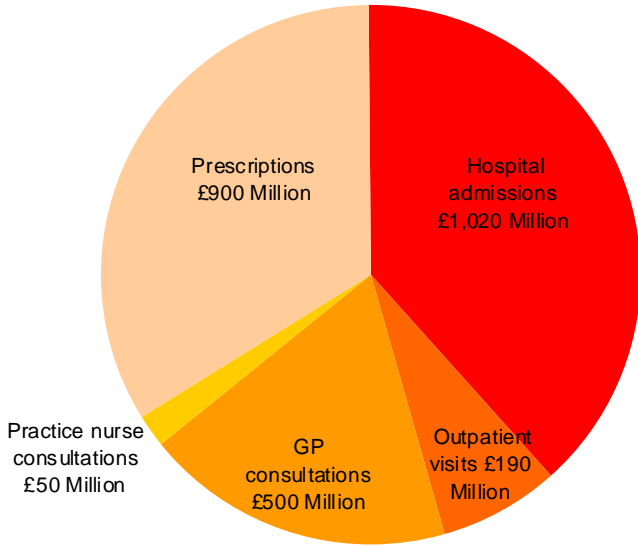
Each week smoking accounts for an estimated £20 million expenditure on hospital admissions, £4 million on outpatients, £10 million on GP consultations, £1 million on practice nurse consultations and £17 million in prescription costs.

Assuming 1996 proportions of current and ex-smokers suggests an additional £380 million smoking cost to the NHS.

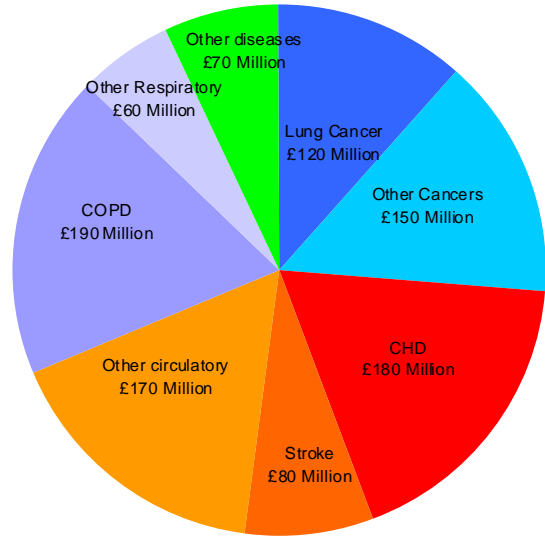
## Conclusion

Smoking continues to represent a significant cost throughout the NHS. The potential impact on costs of reduction in smoking prevalence has been described. The beneficial effect for NHS costs is far outweighed by the beneficial health effects for smokers themselves of quitting.

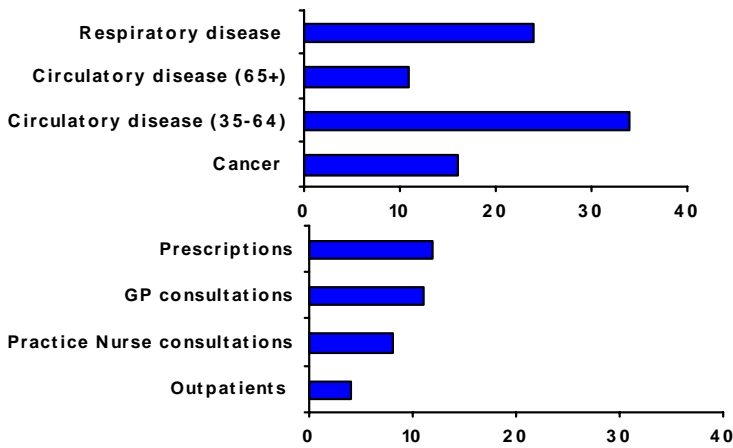
**Total cost of smoking to the NHS - £2.7 Billion**



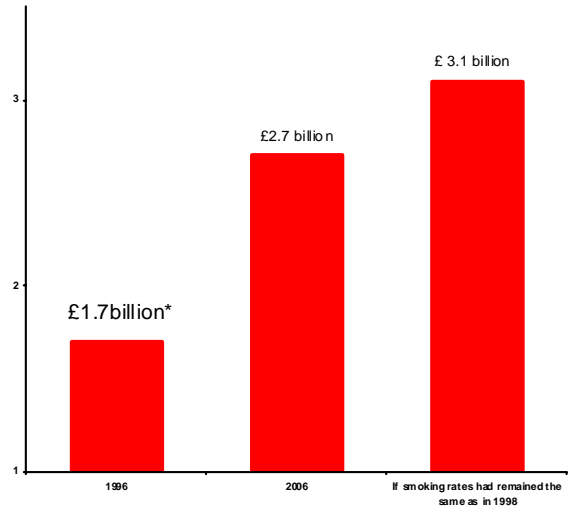
**Hospital admission costs: £1 Billion**



**Hospital admissions**



**Cost of smoking to the NHS and savings associated with the ten year reduction in smoking prevalence**



**About this report**

This research was commissioned for the report 'Beyond *Smoking Kills*' published by ASH on October 8<sup>th</sup> 2008 [www.ash.org.uk/beyondsmokingkills](http://www.ash.org.uk/beyondsmokingkills). Please send enquiries to [enquiries@ash.org.uk](mailto:enquiries@ash.org.uk)