



HEALTH COSTS OF SMOKERS vs. FORMER SMOKERS vs. NON-SMOKERS AND RELATED SAVINGS FROM QUITTING

The best available source for estimates of the difference in the average health costs of smokers versus nonsmokers is still Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures, *Milbank Quarterly*, 70(1): 81-115, 1992. The following table shows the Hodgson study estimates of the excess average healthcare costs for male and female smokers compared to nonsmokers. Using the current ratio of male to female smokers of 56:44 produces the related weighted averages for all smokers. These estimates are all in 1990 dollars.

Higher Smoker Health Costs (1990 \$)	Lifetime	Next Five Years
Males	\$8,638	\$2,525
Females	\$10,119	\$2,069
Weighted Average	\$9,292	\$2,324

Note: The different lifetime costs for smokers vs. non-smokers fully takes into account the fact that smokers, on average, do not live as long.

Updating the Hodgson Study Estimates

Until more recent estimates worth using are produced, it makes sense to update the Hodgson estimates to account for inflation and to make them more comparable to other smoking-caused healthcare cost estimates that are being used by policymakers and researchers. That is done by following the example of the U.S. Centers for Disease Control & Prevention (CDC), which puts its state smoking-caused healthcare costs in 2004 dollars using the consumer price index (CPI) for medical care. [See, e.g., CDC, *Sustaining State Programs for Tobacco Control: Data Highlights 2006*.] That formula produces the following updated Hodgson estimates in 2004 dollars – with each medical care dollar in 1990 equal to \$1.93 in 2004 dollars, and all totals rounded down to be conservative and avoid overstating the healthcare cost reductions from reducing smoking.

Higher Smoker Health Costs (2004 \$)	Lifetime	Next Five Years
Males	\$16,708 ⇒ \$16,500	\$4,884 ⇒ \$4,500
Females	\$19,753 ⇒ \$19,500	\$4,002 ⇒ \$3,800
Weighted Average	\$17,973 ⇒ \$17,500	\$4,495 ⇒ \$4,200

Estimates for Former Smokers

The Hodgson study did not estimate the health costs of smokers who quit – which are, on average, between the smoker and nonsmoker costs – and no specific data on that has been found. But CDC estimates that smokers have a 50% chance of dying from smoking, with former smokers having a 10% to 37% chance. [MMWR 45(44): 971-974, November 8, 1996, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00044348.htm>.] Applying that death-risk ratio to the above health costs suggests that a former smoker's excess health costs would be 10/50 to 37/50 of a smoker's, producing the following estimates, with rounded down averages.

Former Smokers Cost-Savings (2004 \$)	Lifetime	Next Five Years
Former Smokers Excess Costs	\$3,595 to \$12,789 ⇒ \$8,000	\$899 to \$3,198 ⇒ \$2,000
Savings from Quitting	\$5,185 to 14,378 ⇒ \$9,500	\$1,299 to \$3,596 ⇒ \$2,400

For related supporting studies, see, e.g., Nusselder, W., et al., "Smoking and the Compression of Morbidity," *Epidemiology & Community Health*, 2000; Warner, K., et al., "Medical Costs of Smoking in the United States: Estimates, Their Validity, and Their Implications," *Tobacco Control* 8(3): 290-300, Autumn 1999, <http://tc.bmjournals.com/content/vol8/issue3/index.shtml>.

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