

LIFETIME HEALTH COSTS OF SMOKERS vs. FORMER SMOKERS vs. NONSMOKERS

The best source we have found for estimates of the difference in the average health costs of smokers versus nonsmokers is 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.

<u>Higher Smoker Health Costs (1990 \$)</u>	<u>Lifetime</u>
Males	\$8,638
Females	\$10,119
Weighted Average	\$9,292

Updates to the Hodgson Study Estimates

Assuming there are no more recent estimates worth using, 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, public health advocates, and others. To do that, we follow the example of the U.S. Centers for Disease Control & Prevention (CDC), which recently increased its estimates of state smoking-caused healthcare costs to 2004 dollars using the consumer price index (CPI) for medical care. Using 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. [See CDC, *Sustaining State Programs for Tobacco Control: Data Highlights 2006* Rounding down is done to be conservative and avoid overstating the health care cost reductions from reducing smoking.

<u>Higher Smoker Health Costs (2004 \$)</u>	<u>Lifetime</u>	<u>Lifetime – Rounded Down</u>
Males	\$16,708	\$16,500
Females	\$19,753	\$19,500
Weighted Average	\$17,973	\$17,500

Estimates for Former Smokers

The Hodgson study did not provide estimates for the healthcare costs of former smokers -- which must, on average, be somewhere in between the smoker and nonsmoker costs -- and we have not found any data specifically on that point. But CDC has published 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, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00044348.htm>, November 8, 1996.] Applying that death-risk ratio to health costs suggests that former smoker's higher health costs would be 10/50 to 37/50 of a smoker's, producing the following estimates.

<u>Higher Smoker Health Costs (2002 \$)</u>	<u>Lifetime</u>	<u>Lifetime – Rounded Down</u>
Former Smokers Excess Costs	\$3,595 - \$12,789 (Avg: \$8,122)	\$8,000
Savings from Quitting	\$5,185 – \$14,378 (Avg: \$9,851)	\$9,500

For related supporting studies, see 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>.