



FEDERAL CIGARETTE EXCISE TAX INCREASES ESTIMATED NEW REVENUES, COST SAVINGS, AND OTHER BENEFITS & EFFECTS

Current Federal Cigarette Tax Rate: \$0.39 per pack
Last Federal Cigarette Tax Increase: 1/1/2002 (5¢)

Average State Cigarette Tax: \$1.073 per pack (NJ at \$2.575 is highest)
Smoking-Caused Costs & Lost Productivity in USA per pack sold: \$10.28

Tax Increase Per Pack	Additional Cigarette Tax Revenue* (Billions/Yr)	Fewer Packs Sold/Yr (Millions)	Youth Smoker Decline	Fewer Future Youth Smokers	Related Lifetime Health Savings (Billions)	Adult Smoker Decline	Fewer Adult Smokers	Related Lifetime Health Savings (Billions)	Total Future Smoking Deaths Avoided	5-Year Smoking Harmed Births Avoided	5-Year Heart & Stroke Savings (Millions)	5-Year Smoking-Births Savings (Millions)	Overall Long-Term Health Savings (Billions)
0.30	\$4.83	-1,053	-4.5%	921,000	\$16.1	-1.2%	576,000	\$5.5	446,000	114,600	\$270.0	\$194.7	\$21.6
0.35	\$5.60	-1,183	-5.3%	1,074,000	\$18.8	-1.4%	672,000	\$6.4	521,000	133,600	\$315.0	\$227.2	\$25.2
0.40	\$6.37	-1,312	-6.0%	1,228,000	\$21.5	-1.6%	768,000	\$7.3	595,000	152,700	\$360.0	\$259.7	\$28.8
0.45	\$7.12	-1,441	-6.8%	1,381,000	\$24.2	-1.8%	864,000	\$8.2	669,000	171,800	\$405.0	\$292.1	\$32.4
0.50	\$7.86	-1,571	-7.6%	1,535,000	\$26.9	-2.0%	960,000	\$9.1	745,000	190,900	\$450.0	\$324.6	\$36.0
0.55	\$8.59	-1,700	-8.3%	1,688,000	\$29.5	-2.2%	1,056,000	\$10.0	819,000	210,000	\$495.0	\$357.0	\$39.6
0.60	\$9.30	-1,829	-9.1%	1,842,000	\$32.2	-2.4%	1,152,000	\$10.9	894,000	229,100	\$540.0	\$389.5	\$43.2
0.61	\$9.44	-1,855	-9.2%	1,873,000	\$32.8	-2.5%	1,171,000	\$11.1	909,000	232,900	\$549.0	\$396.0	\$43.9
0.65	\$10.00	-1,958	-9.8%	1,995,000	\$34.9	-2.6%	1,248,000	\$11.9	968,000	248,200	\$585.0	\$421.9	\$46.8
0.70	\$10.69	-2,088	-10.6%	2,149,000	\$37.6	-2.8%	1,344,000	\$12.8	1,043,000	267,300	\$630.0	\$454.4	\$50.4
0.75	\$11.36	-2,217	-11.3%	2,302,000	\$40.3	-3.1%	1,440,000	\$13.7	1,117,000	286,400	\$675.0	\$486.8	\$54.0
0.80	\$12.02	-2,346	-12.1%	2,456,000	\$43.0	-3.3%	1,537,000	\$14.6	1,192,000	305,500	\$720.0	\$519.3	\$57.6
0.85	\$12.67	-2,475	-12.9%	2,609,000	\$45.7	-3.5%	1,633,000	\$15.5	1,266,000	324,600	\$765.0	\$551.8	\$61.2
0.90	\$13.31	-2,605	-13.6%	2,763,000	\$48.4	-3.7%	1,729,000	\$16.4	1,342,000	343,700	\$810.0	\$584.2	\$64.8
0.95	\$13.93	-2,734	-14.4%	2,917,000	\$51.0	-3.9%	1,825,000	\$17.3	1,416,000	362,700	\$855.0	\$616.7	\$68.4
1.00	\$14.54	-2,863	-15.1%	3,070,000	\$53.7	-4.1%	1,921,000	\$18.2	1,491,000	381,800	\$900.1	\$649.1	\$72.0

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***These projected revenue estimates are only for increased federal cigarette excise tax revenues. These excise tax revenue increase projections are similar to those made by the Joint Committee on Taxation; but the Joint Committee also assumes a corresponding decrease in other federal tax revenues (e.g., payroll and income taxes) equal to 25 percent of the cigarette excise tax revenue increase.**

Cigarette tax increases boost cigarette tax revenues, despite reducing smoking, because the increased tax per pack brings in more new revenue than is lost from the related declines in pack sales caused by reduced smoking (and by any increased smoker tax avoidance). Parallel increases to federal taxes on other tobacco products would provide more new federal revenue – while also further reducing tobacco use and its many related harms and costs. These projections are fiscally conservative because they include a generous adjustment for lost taxed pack sales (and tax revenues) from new tax avoidance efforts after the tax increase by continuing smokers. The projections are based on research findings that a 10% cigarette price increase reduces youth smoking rates by 6.5% or more, adult rates by 2%, and total consumption by 4%. [See, e.g., Chaloupka, FJ, “Macro-Social Influences: The Effects of Prices and Tobacco Control Policies on the Demand for Tobacco Products,” *Nicotine & Tobacco Research*, 2000, and other price studies at <http://tigger.uic.edu/~fjc> and www.uic.edu/orgs/impacteen.] But these elasticity findings are adjusted downward to be conservative and to account for possible increases in contraband sales and smoker tax evasion. Projected savings are in 2004 dollars, following the U.S. Centers for Disease Control and Prevention (CDC) methodology for updating smoking-caused costs data. [CDC, *Data Highlights 2006*.] 23 states & DC have cigarette tax rates of \$1.00 per pack or more (NJ at \$2.575 and RI at \$2.46 are highest). See <http://tobaccofreekids.org/reports/prices>.

To account for possible additional declines in federal cigarette sales and tax revenues from other, unrelated factors – such as federal and state tobacco prevention investments, new smoke-free laws, other public and private tobacco prevention efforts, state and local tobacco tax increases, cigarette company or retailer increases to cigarette prices, etc. – these projections assume an ongoing background decline in consumption of 1.5% per year.^{*} To be even more conservative, the projected amounts have been rounded down. Despite all of these revenue-reducing adjustments, the projections still show that non-trivial federal cigarette tax increases will both significantly reduce smoking levels and substantially increase federal revenues. [See, e.g., TFK factsheet, *Raising State Cigarette Taxes Always Increases State Revenues (and Always Reduces Smoking)*, <http://tobaccofreekids.org/research/factsheets/pdf/0098.pdf>.][†] These projections assume that the tax increase is fully passed on in higher prices and is adjusted for inflation over time. The estimate of the pre-tax-increase average nationwide starting price per pack in these projections includes all federal and statewide excise and sales taxes but not any purely local taxes (except NY City's \$1.50 per pack cigarette tax is factored into the overall NY State price per pack), and is based on data from Orzechowski & Walker, *Tax Burden on Tobacco*, 2006 [an industry-funded annual report] and USDA Economic Research Service, Tobacco Briefing Room, www.ers.usda.gov/Briefing/tobacco.

The projected adult and youth smoking and smoking-harmed birth declines, and related mortality reductions, are calculated by applying the research findings on the effects of tax and price increases on smoking levels to the number of current adult smokers, the number of smoking-affected births each year nationwide, and CDC estimates of the number of kids alive today who will become adult smokers and die from smoking. [CDC, *Behavioral Risk Factor Surveillance System (BRFSS)*. CDC, "Smoking During Pregnancy—United States, 1990-2002," *Morbidity and Mortality Weekly Report (MMWR)* 53(39):911-915, October 8, 2004, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a1.htm>; CDC, *2006 State Data Highlights*, http://www.cdc.gov/tobacco/data_statistics/state_data/data_highlights/2006/index.htm; CDC, "Projected Smoking-Related Deaths Among Youth—United States," *MMWR* 45(44):971-974, November 8, 1996, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00044348.htm>; CDC, "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs—United States 1995-2001," *MMWR* 54(25):625-628, July 1, 2005, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5425a1.htm>.]

The projected youth and adult healthcare savings accrue over the lifetimes of kids alive today who quit or don't start because of tax increase and over the lifetimes of those current adult smokers who quit because of the increase. Despite shorter life spans, smokers' total lifetime healthcare costs average \$17,500 higher than nonsmokers (in 2004 dollars); but the savings per each adult quitter are substantially less than \$17,500 because adult smokers have already been significantly harmed by their smoking and have already incurred or locked-in extra, smoking-caused health costs. [Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures," *Millbank Quarterly* 70(1), 1992 (see, also, 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). TFK Factsheet, *Lifetime Healthcare Costs: Smokers v. Non-Smokers v. Former Smokers*, <http://tobaccofreekids.org/research/factsheets/pdf/0277.pdf>.] 5-Year Heart & Stroke Savings projections show the estimated reductions in smoking-caused health expenditures within first five years after the tax increase from reduced smoking-caused heart attacks and strokes, based on Lightwood, JM & Glantz, S, "Short-Term Economic and Health Benefits of Smoking Cessation – Myocardial Infarction and Stroke," *Circulation* 96(4), August 19, 1997. These savings will increase considerably in subsequent years. The projected 5-Year Smoking Births Savings accrue from the reductions in smoking-caused birth complications over five years from declines in smoking among pregnant women. [Miller, D, et al., "Birth and First-Year Costs for Mothers and Infants Attributable to Maternal Smoking," *Nicotine & Tobacco Research* 3:25-35, 2001] There are also a range of other short-term savings from the tax-prompted declines in other smoking-caused health problems and other smoking-caused costs. [See, e.g., U.S. Department of the Treasury, *The Economic Costs of Smoking in the U.S. and the Benefits of Comprehensive Tobacco Legislation*, 1998.] Because of research and data limitations, it is not yet possible to provide reasonable estimates of the smoking-caused cost reductions in each year following a cigarette tax increase. Some smoking-caused healthcare cost savings from a cigarette tax increase will be relatively small initially but will grow quickly. The listed 5-Year savings from fewer smoking-caused heart attacks and strokes and from fewer smoking-affected pregnancies show just some of the many substantial short-term savings from the smoking reductions prompted by a tax increase.

Projections will be updated and improved as updated underlying data becomes available and when new data and research findings prompt refinements to the underlying models and formulas. Please direct questions to Eric Lindblom, Campaign for Tobacco-Free Kids, 202-296-5469 or elindblom@tobaccofreekids.org.

For more information, see <http://www.tobaccofreekids.org/research/factsheets/index.php?CategoryID=11> and <http://tobaccofreekids.org/reports/prices>.

^{*} Cigarette company price cuts, federal and state anti-tax-evasion measures (see, e.g., <http://tobaccofreekids.org/research/factsheets/pdf/0226.pdf>), and other factors (including cutbacks in government tobacco prevention efforts) could increase cigarette consumption and/or taxable sales, which would increase cigarette tax revenues beyond the projected amounts.

[†] Smokers who quit or cut back will also spend some of the money they previously spent on cigarettes to purchase other goods on which sales tax is collected, thereby increasing overall state sales tax revenues.