



INDIANA CIGARETTE EXCISE TAX INCREASES

ESTIMATED NEW REVENUES, COST SAVINGS, AND OTHER BENEFITS & EFFECTS

Current State Cigarette Tax Rate: \$0.555 per pack
Smoking-Caused Costs in State Per Pack Sold: \$7.57

Nationwide State Average: \$1.02 per pack (NJ at \$2.575 is highest)
Indiana Rank Among All States: 37th (1 is highest)

Tax Increase Per Pack	Total New State Cig Tax Revenue (Millions/Yr)	Fewer State Packs Sold/Yr (Millions)	Fewer Future Youth Smokers	Fewer Adult Smokers	Smoking Caused Deaths Avoided	Overall Long-Term Health Savings (Millions)	Compared to \$1.00 Tax Increase					
							Less State Cig Tax Revenue (Millions/Yr)	More Packs Sold/Yr (Millions)	Fewer Future Youth Smokers	Fewer Adult Smokers	Fewer Smoking Caused Deaths Avoided	Less Long-Term Health Savings (Millions)
\$1.00	\$349.7	-173.1	90,300	53,200	42,800	\$2,085.7	--	--	--	--	--	--
\$0.40	\$176.1	-74.8	36,100	21,300	17,100	\$834.1	-\$173.60	+98.3	-54,200	-31,900	-25,700	-\$1,251.60
\$0.60	\$247.1	-107.5	54,200	31,900	25,700	\$1,251.6	-\$102.60	+65.6	-36,100	-21,300	-17,100	-\$834.10
\$0.80	\$305.0	-140.3	72,200	42,600	34,300	\$1,668.2	-\$44.70	+32.8	-18,100	-10,600	-8,500	-\$417.50

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The public health benefits and cost reductions from any cigarette tax increase less than 30 or 40 cents are far from secure and much less certain than those obtained from larger rate increases. Faced with relatively small cigarette tax increases, big cigarette companies can fairly easily mute or eliminate any related smoking declines and public health benefits by temporarily reducing their own prices and activating a range of temporary retailer-based discounts and promotions. In contrast, a larger cigarette tax increase (e.g, 50 cents or more) is simply too large for the cigarette companies to handle or offset effectively. To obtain strong public health benefits from small cigarette tax increases, some of the new revenues must be allocated to expanded tobacco prevention efforts.

These 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 down to be conservative and to account for some smokers avoiding the price increases through tax evasion strategies. All savings are in 2004 dollars, following the methodology of the U.S. Centers for Disease Control and Prevention (CDC) to update its state smoking-caused costs data. [CDC, *Data Highlights 2006*.] Revenue projections show net new revenues above the prior year's revenue total.

For more information, see <http://tobaccofreekids.org/research/factsheets/index.php?CategoryID=18> and <http://tobaccofreekids.org/reports/prices>.

Cigarette tax increases boost state cigarette tax revenues, despite reducing smoking, because the increased tax per pack brings in more new revenue than is lost from the declines in pack sales prompted by the rate increase. These projections are fiscally conservative because they include generous adjustments for lost state pack sales (and tax revenues) from new tax avoidance efforts or increased smuggling after the tax increase. [See, e.g., Farelly, M, et al., *State Cigarette Excise Taxes: Implications for Revenue and Tax Evasion*, RTI International, 2003, http://www.rti.org/pubs/8742_Excise_Taxes_FR_5-03.pdf. But see, also, *Proposed Federal Measures to Reduce Cigarette Smuggling and Protect Federal Revenues*, <http://tobaccofreekids.org/research/factsheets/pdf/0226.pdf>.] Parallel increases to state taxes on other tobacco products would provide more new revenue – while also further reducing tobacco use and its related harms and costs in the state.

To account for possible additional declines in state cigarette sales and tax revenues from other, unrelated factors -- such as state tobacco prevention investments, other public and private tobacco prevention efforts, federal 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 state cigarette tax increases will both significantly reduce smoking levels and substantially increase state 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 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), 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 in each state, the number of smoking-affected births in each state, and the U.S. Centers for Disease Control and Prevention (CDC) estimates of the number of kids alive today in each state 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), October 8, 2004, <http://www.cdc.gov/mmwr/PDF/wk/mm5339.pdf>. CDC, *State Highlights 2006*, and CDC, "Projected Smoking-Related Deaths Among Youth – United States," *MMWR* 45(44), November 11, 1996, www.cdc.gov/mmwr/mmwr_wk.html. See also, "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States 1995-1999," *MMWR*, www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm, April 11, 2002.]

The projected youth and adult healthcare savings accrue over the lifetimes of kids alive in the state 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. Campaign 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 & Glantz, "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.

* Cigarette company price cuts, federal and state anti-tax-evasion measures (see <http://tobaccofreekids.org/research/factsheets/pdf/0274.pdf>), and other factors could also work to *increase* cigarette consumption and/or taxable sales in the state, which would *increase* state 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.