



RAISING CIGARETTE TAXES REDUCES SMOKING, ESPECIALLY AMONG KIDS (AND THE CIGARETTE COMPANIES KNOW IT)

Based on a comprehensive review of evidence, the Surgeon General has called raising prices on cigarettes “one of the most effective tobacco control interventions” because increasing price is proven to reduce smoking, especially among kids.¹ However, the cigarette companies have opposed tobacco tax increases by arguing that raising cigarette prices would not reduce adult or youth smoking. But the companies’ internal documents, disclosed in the tobacco lawsuits, show that they know very well that raising cigarette prices is one of the most effective ways to prevent and reduce smoking, especially among kids.

- Philip Morris: *Of all the concerns, there is one - taxation - that alarms us the most. While marketing restrictions and public and passive smoking [restrictions] do depress volume, in our experience taxation depresses it much more severely. Our concern for taxation is, therefore, central to our thinking*²
- Philip Morris: *When the tax goes up, industry loses volume and profits as many smokers cut back.*³
- RJ Reynolds: *If prices were 10% higher, 12-17 incidence [youth smoking] would be 11.9% lower.*⁴
- Philip Morris: *It is clear that price has a pronounced effect on the smoking prevalence of teenagers, and that the goals of reducing teenage smoking and balancing the budget would both be served by increasing the Federal excise tax on cigarettes.*⁵
- Philip Morris: *Jeffrey Harris of MIT calculated . . . that the 1982-83 round of price increases caused two million adults to quit smoking and prevented 600,000 teenagers from starting to smoke . . . We don't need to have that happen again.*⁶
- Philip Morris: *A high cigarette price, more than any other cigarette attribute, has the most dramatic impact on the share of the quitting population . . . price, not tar level, is the main driving force for quitting.*⁷

[For more on cigarette company documents and price/tax increases see the 2002 study in the *Tobacco Control* journal, “Tax, Price and Cigarette Smoking: Evidence from the Tobacco Documents.”⁸]

The cigarette companies have even publicly admitted the effectiveness of tax increases to deter smoking in their required filings with the U.S. Securities and Exchange Commission.

- Philip Morris: *Tax increases are expected to continue to have an adverse impact on sales of tobacco products by our tobacco subsidiaries, due to lower consumption levels . . .* [10-Q Report, November 3, 2008]
- Lorillard Tobacco: *We believe that increases in excise and similar taxes have had an adverse impact on sales of cigarettes. In addition, we believe that future increases, the extent of which cannot be predicted, could result in further volume declines for the cigarette industry, including Lorillard Tobacco . . .* [10-Q Report, November 4, 2008]
- R.J. Reynolds: *Together with manufacturers’ price increases in recent years and substantial increases in state and federal taxes on tobacco products, these developments have had and will likely continue to have an adverse effect on the sale of tobacco products.* [10-Q Report, October 24, 2008]

Or, as the Convenience Store News put it: *“It’s not a hard concept to grasp -- as taxes on cigarettes goes up, sales of cigarettes go down.”*⁹

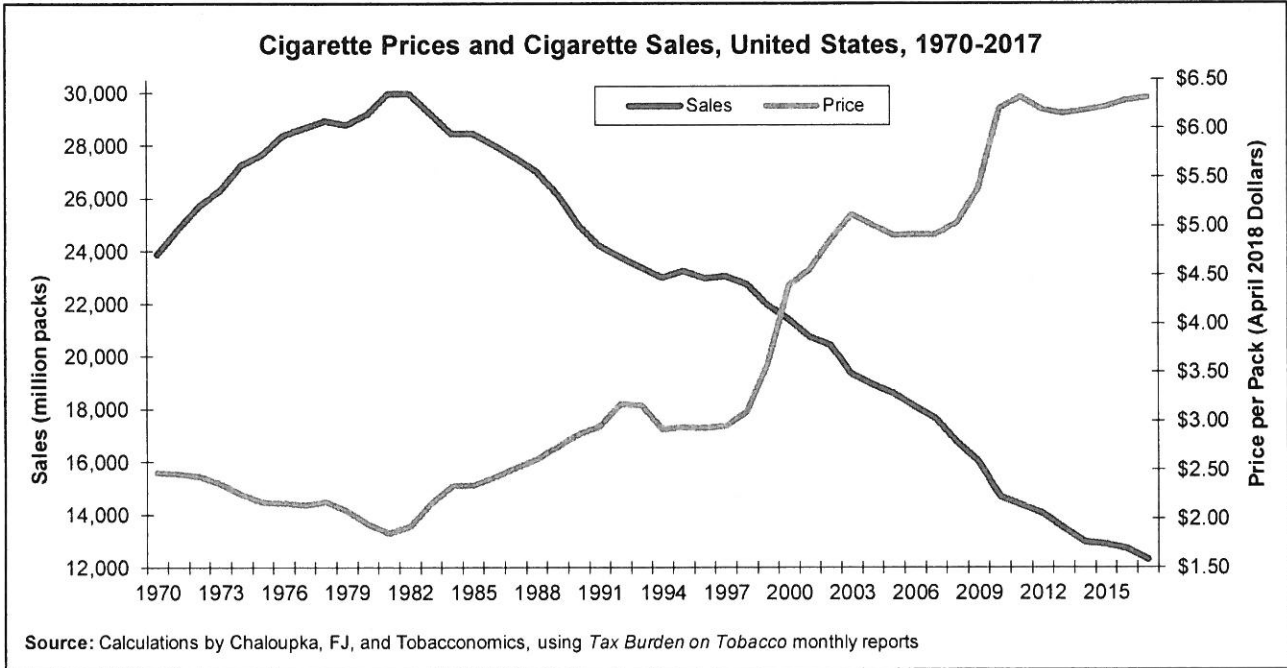
Economic Research Confirms That Cigarette Tax Increases Reduce Smoking. Numerous economic studies in peer-reviewed journals have documented that cigarette tax or price increases reduce both adult and underage smoking. The general consensus is that nationally, every 10 percent increase in the real price of cigarettes reduces adult smoking by about two percent, reduces smoking among young adults by about 3.5 percent, reduces the number of kids who smoke by six or seven percent, and reduces overall cigarette consumption by approximately three to five percent.¹⁰ Research studies have also found that:

- Cigarette price and tax increases work even more effectively to reduce smoking among Blacks, Hispanics, and lower-income smokers.¹¹

- A cigarette tax increase that raises prices by ten percent will reduce smoking among pregnant women by seven percent, preventing thousands of spontaneous abortions and still-born births, and saving tens of thousands of newborns from suffering from smoking-affected births and related health consequences.¹²
- Higher taxes on smokeless tobacco reduce its use, particularly among young males; and increasing cigar prices through tax increases reduce adult and youth cigar smoking.¹³
- By reducing smoking levels, cigarette tax increases reduce secondhand smoke exposure among nonsmokers, especially children and pregnant women.

Increasing Cigarette Prices and Declining Consumption

Although there are many other factors involved, the trends in cigarette prices and overall U.S. cigarette consumption from 1970 to 2017 show that there is a strong correlation between increasing prices and decreasing consumption.



While U.S. cigarette prices are largely controlled by the tobacco companies' price-setting decisions, increases in federal and state cigarette taxes also impact prices. Since 1970, the federal tax on cigarettes increased from eight cents to \$1.01 per pack, with the largest one-time increase of 61.66 cents per pack occurring in 2009. Meanwhile, the average state cigarette tax increased from 10 cents to \$1.81 per pack today. Without these federal and state tax increases, U.S. cigarette prices would be much lower and U.S. smoking levels would be much higher.

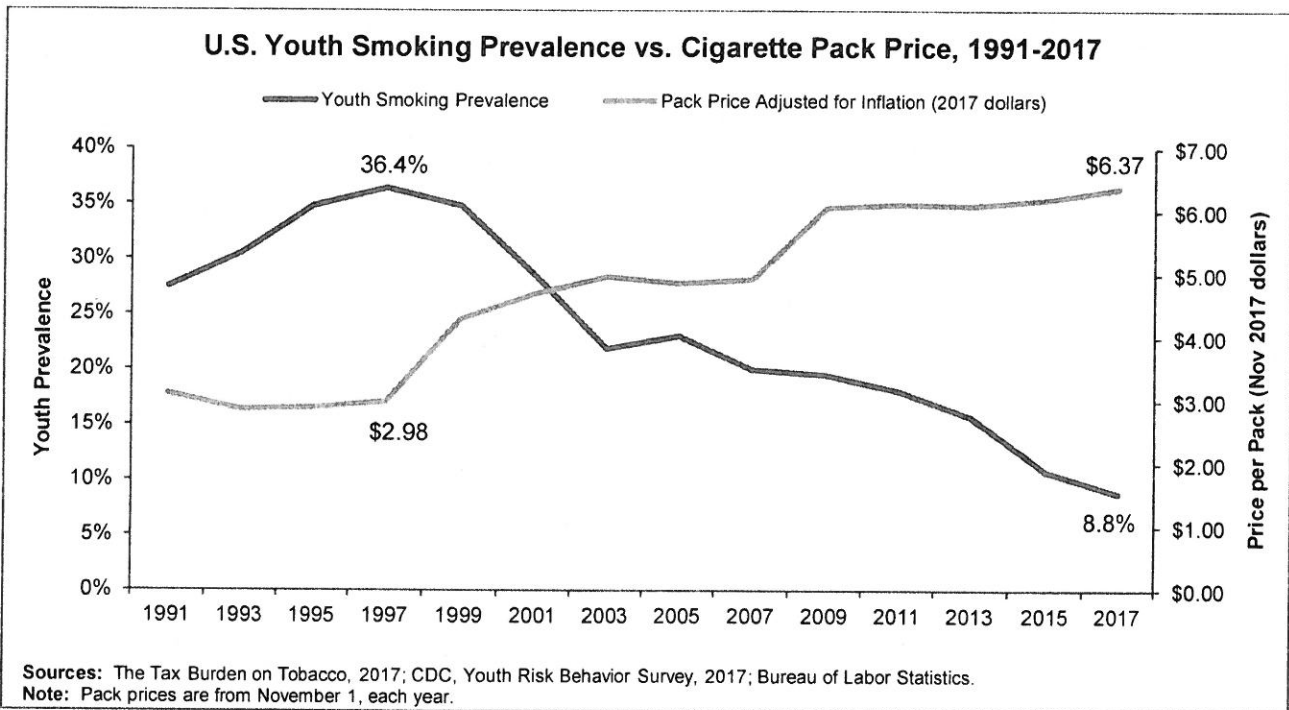
2009 Federal Experience. After the 2009 federal tobacco tax increase passed, calls to the national quitline (1-800-QUITNOW), which provides assistance to people who want to quit, increased by 30 percent in the 12 months after the increase compared to the 12 months before.¹⁴ In 2009, national pack sales declined by 8.3 percent—the largest one-year decline since 1932.

State Experiences. In every single state that has significantly raised its cigarette tax rate, pack sales have gone down sharply.¹⁵ While some of the decline in pack sales comes from interstate smuggling and from smokers going to other lower-tax states to buy their cigarettes, reduced consumption from smokers quitting and cutting back plays a more powerful role. As shown above, nationwide data – which count both legal in-state purchases and packs purchased through cross-border, Internet, or smuggled sales – show that overall packs sales go down as state cigarette tax increases push up the average national price.

Data show that state cigarette tax increases are prompting many smokers to quit or cutback. For example, after Oklahoma's \$1.00 per pack cigarette tax increase went into effect on July 1, 2018, its Tobacco Helpline saw an 85 percent increase in registrations in the first month compared to the same period the year before.¹⁶

Similarly, Wisconsin Quit Line received a record-breaking 20,000 calls in the first two months after its \$1.00 per cigarette pack increase (it typically receives 9,000 calls per year).¹⁷ Likewise, in Texas and Iowa, which each increased their cigarette taxes by \$1.00 in 2007, the number of calls to the state quitlines were much higher compared to the year before.¹⁸ It is also clear that these efforts to quit by smokers after tax increases translate directly into lower future smoking rates. In Washington State, for example, adult smoking from the year before its 60-cent cigarette tax increase in 2002 to the year afterwards declined from 22.6 to 19.7 percent, reducing the number of adult smokers in the state by more than 100,000, despite overall population increases.¹⁹

Prices and Youth Smoking Rates. The chart below shows how closely linked youth smoking prevalence is to cigarette pack prices. As prices climbed in the late 1990s and early 2000s, youth smoking rates declined, but as the price decreased between 2003 and 2005 (along with funding for tobacco prevention programs in many states), youth rates increased. More recently, spurred in part by the large jump in price in 2009 from the large federal tobacco tax increase and the many state cigarette tax increases, youth smoking rates have fallen more rapidly.



Researchers found that the 61.66-cent federal cigarette tax rate increase on April 1, 2009 had a substantial and immediate impact on youth smoking. The percentage of students who reported smoking in the past 30 days dropped between 9.7 percent and 13.3 percent immediately following the tax increase, resulting in an estimated 220,000 to 287,000 fewer current smokers among middle and high school students in May 2009.²⁰

Expert Conclusions on Cigarette Prices and Smoking Levels

- The National Cancer Institute (NCI) and World Health Organization (WHO) concluded in their 2017 report, *The Economics of Tobacco and Tobacco Control*, "A substantial body of research, which has accumulated over many decades and from many countries, shows that significantly increasing the excise tax and price of tobacco products is the single most consistently effective tool for reducing tobacco use. Significant increases in tobacco taxes and prices reduce tobacco use by leading some current users to quit, preventing potential users from initiating use, and reducing consumption among current users."²¹
- The 2014 Surgeon's General Report recommends increasing tobacco taxes to reduce or prevent tobacco use. Specifically, the report states, "Evidence shows that large tax and, hence, price increases will decrease tobacco use each time they are implemented."²²
- In November 2012, the Community Preventive Services Task Force, under the U.S. Department of Health and Human Services, completed a thorough review of recent evidence on the effectiveness of tobacco product price increases, including increasing tobacco taxes. Based on that work, the Task Force

"recommends interventions that increase the unit price of tobacco products based on strong evidence of effectiveness in reducing tobacco use. Evidence is considered strong based on findings from studies demonstrating that increasing the price of tobacco products: Reduces the total amount of tobacco consumed; Reduces the prevalence of tobacco use; Increases the number of tobacco users who quit; Reduces initiation of tobacco use among young people; Reduces tobacco-related morbidity and mortality."²³

- The 2012 Surgeon General's report, *Preventing Tobacco Use Among Youth and Young Adults*, stated, "Federal, state, and local taxes that raise prices on tobacco products improve public health by reducing initiation, prevalence, and intensity of smoking among young people. Comprehensive reviews of the literature on the effect of price on tobacco consumption estimate a 3–5% reduction in overall cigarettes consumed as a result of a 10% increase in cigarette prices, and youth and young adults have proven to be even more responsive than adults to higher cigarette prices."²⁴
- In its 2007 report, *Ending the Tobacco Problem: A Blueprint for the Nation*, the National Academy of Sciences' Institute of Medicine recommends raising cigarette taxes in states with low rates and indexing them to inflation, to reduce cigarette consumption and to provide money for tobacco control. The report states, "Tobacco excise tax revenues pose a potential funding stream for state tobacco control programs. Setting aside about one-third of the per-capita proceeds from tobacco excise taxes would help states fund programs at the level suggested by CDC."²⁵
- The President's Cancer Panel's 2007 report, *Promoting Healthy Lifestyles*, advised increasing state tobacco taxes, stating, "Increases in tobacco excise taxes, which are passed along to consumers in the form of higher tobacco product prices, have proven highly effective in reducing tobacco use by promoting cessation among current users, discouraging relapse among former users, preventing initiation among potential users, and reducing consumption among those who continue to use tobacco. These revenues also provide crucial dollars needed to fund anti-tobacco efforts."²⁶
- The 2000 U.S. Surgeon General's Report, *Reducing Tobacco Use*, found that raising tobacco-product prices decreases the prevalence of tobacco use, particularly among kids and young adults, and that tobacco tax increases produce "substantial long-term improvements in health." From its review of existing research, the report concluded that raising tobacco taxes is one of the most effective tobacco prevention and control strategies.²⁷
- Wall Street tobacco industry analysts have long recognized the powerful role increased cigarette taxes and rising cigarette prices play in reducing U.S. smoking levels. For example, a December 1998 "Sensitivity Analysis on Cigarette Price Elasticity" by Credit Suisse First Boston Corporation settled on a "conservative" estimate that cigarette consumption will decline by four percent for every 10 percent increase in price.
- In its 1998 report, *Taking Action to Reduce Tobacco Use*, the National Academy of Sciences' Institute of Medicine concluded, "the single most direct and reliable method for reducing consumption is to increase the price of tobacco products, thus encouraging the cessation and reducing the level of initiation of tobacco use."²⁸

Campaign for Tobacco-Free Kids, June 28, 2019 / Ann Boonn

More information on state tobacco taxes is available at
http://www.tobaccofreekids.org/facts/issues/fact_sheets/policies/tax/us_state_local/.

¹ U.S. Department of Health and Human Services (HHS), *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*, Atlanta, GA: HHS, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>.

² Philip Morris document, "General Comments on Smoking and Health," Appendix I in *The Perspective of PM International on Smoking and Health Initiatives*, March 29, 1985, Bates No. 2023268329/8348.

³ Ellen Merlo, Senior Vice President of Corporate Affairs, Philip Morris, 1994 draft speech to the Philip Morris USA Trade Council, January 11, 1994, Bates No. 2022811708/1755.

⁴ R.J. Reynolds Executive D. S. Burrows, "Estimated Change In Industry Trend Following Federal Excise Tax Increase," September 20, 1982, Bates No. 501988846/8849.

⁵ Philip Morris Research Executive Myron Johnston, "Teenage Smoking and the Federal Excise Tax on Cigarettes," September 17, 1981, Bates No. TA82034-TA82038.

⁶ Philip Morris Executive Jon Zoler, "Handling An Excise Tax Increase," September 3, 1987, Bates No. 2022216179/6180.

⁷ Philip Morris Executive Claude Schwab, "Cigarette Attributes and Quitting," March 4, 1993, Bates No. 2045447810.

⁸ Chaloupka, FJ, et al., "Tax, Price and Cigarette Smoking: Evidence from the Tobacco Documents and implications for tobacco company marketing strategies," *Tobacco Control* 11:62-72, March 2002.

⁹ "Cigarette Sales Down after Tax Increases," *Convenience Store News*, June 5, 2009.

¹⁰ See, e.g., Chaloupka, FJ, "Macro-Social Influences: The Effects of Prices and Tobacco Control Policies on the Demand for Tobacco Products," *Nicotine and Tobacco Research* 1(Suppl 1):S105-9, 1999; other studies at <http://www.ihrp.uic.edu/researcher/frank-j-chaloupka-phd> and <http://tobacconomics.org/>; Tauras, J, "Public Policy and Smoking Cessation Among Young adults in the United States," *Health Policy* 6:321-32, 2004; Tauras, J, et al., "Effects of Price and Access Laws on Teenage Smoking Initiation: A National Longitudinal Analysis," National Bureau of Economic Research Working Paper 8331, June 2001, <http://www.nber.org/papers/w8331>. Chaloupka, FJ & Pacula, R, *An Examination of Gender and Race Differences in Youth Smoking Responsiveness to Price and Tobacco Control Policies*, National Bureau of Economic Research, Working Paper 6541, April 1998; Emery, S, et al., "Does Cigarette Price Influence Adolescent Experimentation?," *Journal of Health Economics* 20:261-270, 2001; Evans, W & Huang, L, *Cigarette Taxes and Teen Smoking: New Evidence from Panels of Repeated Cross-Sections*, working paper, April 15, 1998; Harris, J & Chan, S, "The Continuum-of-Addiction: Cigarette Smoking in Relation to Price Among Americans Aged 15-29," *Health Economics Letters* 2(2):3-12, February 1998, <http://www.mit.edu/people/jeffrey/HarrisChanHEL98.pdf>. HHS, *Reducing Tobacco Use: A Report of the Surgeon General*, Atlanta, Georgia: HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000, http://profiles.nlm.nih.gov/NN/B/B/L/Q/_/nnbblq.pdf.

¹¹ See, e.g., CDC, "Responses to Cigarette Prices By Race/Ethnicity, Income, and Age Groups – United States 1976-1993," *Morbidity and Mortality Weekly Report* 47(29):605-609, July 31, 1998, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00054047.htm>. Chaloupka, FJ & Pacula, R, *An Examination of Gender and Race Differences in Youth Smoking Responsiveness to Price and Tobacco Control Policies*, National Bureau of Economic Research, Working Paper 6541, April 1998. Oredein, T & Foulds, J, "Causes of the Decline in Cigarette Smoking Among African American Youths From the 1970s to the 1990s," *American Journal of Public Health* e1-e11, doi:10.2105/AJPH.2011.300289, August 18, 2011.

¹² Ringel, J & Evans, W, "Cigarette Taxes and Smoking During Pregnancy," *American Journal of Public Health* 91(11):1851-6, 2001. See also, TFK Factsheet, *Harm Caused by Pregnant Women Smoking or Being Exposed to Secondhand Smoke*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0007.pdf>.

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¹⁴ Analysis of data from calls to 1-800-QUIT-NOW.

¹⁵ TFK Factsheet, *Raising State Cigarette Taxes Always Increases State Revenues (and Always Reduces Smoking)*, <http://tobaccofreekids.org/research/factsheets/pdf/0098.pdf>.

¹⁶ Collins, E, "Tobacco tax hike has more Oklahoma smokers trying to quit," *KOKH*, August 9, 2018, <https://ktul.com/news/local/tobacco-tax-hike-has-more-oklahomans-trying-to-quit>.

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¹⁸ Souza, M, "Thank you for Smoking," *Longview-News Journal*, April 22, 2007. "Calls to Quitline Iowa double after cigarette tax raised," *AP*, March 22, 2007. See also, TFK Factsheet, *Quitlines Help Smokers Quit*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0326.pdf>.

¹⁹ CDC, Current Adult Smokers, Behavioral Risk Factor Surveillance System (BRFSS).

²⁰ Huang, J & Chaloupka, FJ, *The Impact of the 2009 Federal Tobacco Excise Tax Increase on Youth Tobacco Use*, National Bureau of Economic Research Working Paper 18026, April 2012, <http://www.nber.org/papers/w18026>.

²¹ U.S. National Cancer Institute & World Health Organization, *The Economics of Tobacco and Tobacco Control*, National Cancer Institute Tobacco Control Monograph 21, NIH Publication No. 16-CA-8029A, Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, CH: World Health Organization; 2016, https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf.

²² HHS, *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*, 2014, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>

²³ Community Preventive Services Task Force, *Reducing Tobacco Use and Secondhand Smoke Exposure: Interventions to Increase the Unit Price for Tobacco Products*, Task Force Finding and Rationale Statement, 2014, <http://www.thecommunityguide.org/tobacco/RRincreasingunitprice.html>.

²⁴ HHS, *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*, 2012, <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>.

²⁵ Institute of Medicine (IOM), *Ending the tobacco problem: A blueprint for the nation*, Washington, DC: The National Academies Press, 2007, <https://www.nap.edu/catalog/11795/ending-the-tobacco-problem-a-blueprint-for-the-nation>.

²⁶ President's Cancer Panel, *Promoting Healthy Lifestyles*, 2006-2007 Annual Report, August 2007, <https://deainfo.nci.nih.gov/advisory/pcp/annualReports/pcp07rpt/pcp07rpt.pdf>.

²⁷ HHS, *Reducing Tobacco Use: A Report of the Surgeon General*, 2000, http://profiles.nlm.nih.gov/NN/B/B/L/Q/_/nnbblq.pdf.

²⁸ IOM, *Taking Action to Reduce Tobacco Use*, Washington, DC: National Academy Press, 1998, <https://www.nap.edu/catalog/6060/taking-action-to-reduce-tobacco-use>.