

Health Policy Brief

Tobacco Taxes. To curb smoking and raise revenue, governments impose taxes on tobacco products.

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WHAT'S THE ISSUE?

Tobacco products are the only legally available products that can kill up to half of their regular users if consumed as recommended by the manufacturer. <u>Tobacco use causes</u> nearly six million deaths a year worldwide and more than 540,000 deaths in the United States. And 10 percent of that total comes from exposure to secondhand smoke.

Public health officials try to reduce smoking in many ways—from smoke-free policies to targeted mass media campaigns to raising the legal purchasing age from eighteen to twentyone. Other tactics include graphic warning labels, plain packaging, and the elimination of smoking in youth-rated movies. Like many of these interventions, taxing tobacco products works on multiple fronts: convincing some people to quit entirely, stopping others from becoming regular smokers, and discouraging former smokers from starting again. And its effectiveness is increased when all or much of the tax revenue is used to pay for smoking prevention and cessation programs.

While the price elasticity of tobacco demand varies depending on the demographic, the rule of thumb in the United States is that a 10 percent price increase on a pack of cigarettes results in anywhere from a 2.5 percent to a 5.0 percent overall decline in smoking, with most studies showing an average 4.0 percent drop. Many studies have found that the impact is more pronounced on teen smoking, which can fall as much as three times that amount. There are <u>several reasons</u> for this: Younger smokers have been smoking a shorter time than older smokers and are likely less addicted; they have less money, so they are more sensitive to price hikes; and teenagers tend to be more presentoriented than adults, and so react more immediately to price hikes. The effect, however, is not universal: Some teenagers just starting to use tobacco might smoke only one or two cigarettes a week, so a price hike would have only a minimal impact.

Nevertheless, the addictive quality of smoking means that it is often difficult for people to stop smoking immediately. As a result, the long-term impact on reducing tobacco use through higher taxes can be twice as much as the short term.

Because the effect of a tax increase depends on its magnitude, tobacco taxes must occur in sizable increments to make a significant dent in smoking rates. For cigarettes, that means at least 50 cents per pack but ideally \$1-\$2 per pack. Anything less, and the cost is too easily absorbed and barely noticed. Tobacco companies can also quickly offset smaller tax hikes by offering discounted prices or distributing coupons.

The fifty states and the District of Columbia all tax cigarettes but at <u>wildly varying rates</u> from 17 cents a pack in Missouri (by far the

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lowest) to \$4.35 in New York State. Some counties and cities also add their own taxes. In Chicago, for example, the combined federal, state, county, and city taxes are \$7.17 per pack, the highest in the country.

WHAT'S THE BACKGROUND?

Taxing tobacco is not a new idea. "Sugar, rum, and tobacco, are commodities which are no where necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation," wrote Adam Smith in An Inquiry into the Nature and Causes of the Wealth of Nations, in 1776. As Smith pointed out, tobacco is a perfect revenue raiser because it's widely used and not essential for life. And that was nearly two hundred years before the landmark 1964 Surgeon General's 386-page report, which definitively stated that cigarette smoking was "causally related" to lung cancer in men, was published by the Government Printing Office (and available for just \$1.25). At the time, 70 million Americans regularly consumed tobacco, out of a population of 190 million. That's a per capita consumption of 4,345 manufactured cigarettes per person.

Cigarette consumption began in earnest in the United States in the 1920s as the tobacco industry pioneered mass marketing, more than doubling over the decade to 120 billion by 1930, according to the annual industry-backed compendium, *The Tax Burden on Tobacco*. Tobacco was one of the earliest consumer products to be taxed by the federal government and has been an established part of the federal tax system since the Civil War. In 1951 the federal cigarette tax was fixed at 8 cents a pack, where it remained for more than three decades.

In 1921 Iowa became the first state to tax cigarettes. But state taxes remained very low for the next several decades, and they existed for revenue purposes only, not for anti-smoking programs. In addition, they were infrequently raised. North Carolina was the last state to tax cigarettes when it added a 2-cent tax per cigarette pack in 1969.

As the health risks became clearer in the 1970s and academic studies appeared that drew a direct connection between higher prices and less tobacco use, many states raised their tobacco taxes in the 1980s and 1990s, and some more than doubled them, albeit from low baselines. The federal excise tax was doubled to 16 cents a pack in 1983. That figure was increased slowly, reaching 39 cents a pack in 2002, where it stayed until 2009. (The effective increase was far less significant: 16 cents in 1983 had the same purchasing power as 34 cents in 2009.)

In 2009, to help cover the cost of the State Children's Health Insurance Program, the federal tax jumped 62 cents a pack to \$1.01. The hike resulted in a 10.0 percent drop in teenage smoking rates, according to the Campaign for Tobacco-Free Kids, while overall cigarette sales fell 8.3 percent that same year, the largest drop since 1932. The \$1.01-per-pack federal tax rate remains in effect today.

State tobacco taxes, meanwhile, according to the Campaign, have been rising quite frequently of late. According to the group, since 2002 forty-seven states and the District of Columbia have raised their cigarette tax rates a total of more than 120 times.

Although most cities and counties are prohibited by state preemption laws from levying their own cigarette taxes, there are exceptions. According to the Campaign for Tobacco-Free Kids, more than 600 local jurisdictions have levied their own tobacco taxes, including Cook County, Illinois (where Chicago is located), and Juneau, Alaska, both at \$3.00 a pack; Philadelphia, Pennsylvania, at \$2.00 a pack; New York City at \$1.50 a pack; and Chicago, at \$1.18 a pack.

WHAT'S THE POLICY?

Tobacco taxes can serve multiple functions, although in most cases, in both the United States and around the world, the overriding concern has been to provide a steady revenue stream, not to curb tobacco use.

There are two types of taxes: specific excise taxes, which are a *specific* price charged for a specific amount—either per cigarette or pack or a quantity of loose tobacco—and ad valorem excise taxes, which are based on a percentage of the factory or retail price.

According to the 2012 article "Tobacco Taxes as a Tobacco Control Strategy," published in the journal *Tobacco Control*, there is a "clear relationship" among taxes, price, and income levels, "with the average price, average excise tax and tax as a share of the price falling as income falls." And according to the World Health Organization's (WHO's) 2015 report on the global tobacco epidemic, the average cost of a pack of cigarettes in high-income countries was \$5.53, with excise and other



taxes making up 64.8 percent of that figure. In low-income countries, a pack of cigarettes averaged \$2.03, with excise and other taxes making up 45.8 percent of the price.

In the United States, thirty-four states tax cigarettes at \$1.00 or more per pack, and sixteen states plus the District of Columbia tax cigarettes at \$2.00 or more per pack.

As of late 2015 the average retail cost of a full-price brand-name pack of cigarettes ranged from a low of \$5.01 in Missouri to a high of \$10.57 in New York. For the fiscal year ending June 30, 2015, total federal, state, and municipal taxes levied on cigarettes alone were a little more than \$30 billion.

Three states are holding ballot initiatives on tobacco tax increases in 2016: California, North Dakota, and Colorado. In addition, two competing but relatively small tobacco tax increases supported by rival tobacco companies are on the ballot in Missouri, although that might not be the case come Election Day, since each measure is in the midst of litigation.

The California ballot initiative would raise the tax on a pack of cigarettes from 87 cents to \$2.00 per pack; North Dakota's per pack tax would jump from 44 cents to \$2.20, while Colorado's current tax of 84 cents per pack would climb to \$1.75. Other tobacco products, including liquid nicotine, would also see tax hikes, depending on the particular state's initiative.

Case study: Chicago

Three years ago Chicago Mayor Rahm Emanuel tried and failed to push a 75-cents-per-pack cigarette tax through the Chicago City Council after several aldermen complained that it would encourage black-market and single sales of cigarettes. But his 50-cents-per-pack compromise, combined with county, state, and federal taxes, nonetheless gave the Windy City the distinction of having the most heavily taxed cigarettes in the country—\$7.17 a pack.

A few months later, the city announced that smoking among the city's high school students had dropped to its lowest recorded rate ever: 10.7 percent, a nearly 3-percentage-point drop in two years, and down almost 60.0 percent from 2001, when about one-quarter of all Chicago high school students said they were smokers. The timing was propitious, if coincidental.

Chicago can't take all the credit for its record cigarette tax. While the city's 50-cent tax hike brought the local tax to a not insubstantial \$1.18 a pack, Cook County, where Chicago is located, also levies \$3.00 a pack, the state adds \$1.98, and there is a \$1.01 federal excise tax, all of which go into the \$7.17-per-pack figure.

Still, few if any cities can match Chicago for the comprehensiveness of its anti-smoking attack, embodied in Healthy Chicago, a public health agenda for the city launched in 2011, the year Mayor Emanuel took office. The program puts a double emphasis on youth smoking. The reason is obvious: <u>Nearly 90 percent</u> of all smokers first tried smoking by the time they were eighteen. Young smokers, compared to adults, are more susceptible to cigarette advertisements and <u>more inclined</u> to remember them. And they are highly susceptible to the addictive quality of nicotine.

Under the Healthy Chicago plan, the city has done everything from banning smoking in city parks and harbors to targeting lesbian, gay, bisexual, and transgender women of color, who according to the city have been "<u>especially resistant</u>" to traditional tobacco cessation efforts. Retailers who want to sell flavored tobacco products must now be 500 feet from a school, not 100 feet. And Chicago says it's the first municipality to include menthol, which is particularly popular in the African American community, as a "flavored" tobacco product.

The city also runs a "Check the Stamps" reward program, which will pay \$100 to anyone who reports an illegal tobacco sale that leads to a conviction or "finding of liability." Cigarettes sold in Chicago must have two stamps on the bottom of the pack, one from Cook County and one from the State of Illinois. Anyone reporting a black-market sale outside of a retail shop that doesn't include both stamps on each pack, cigarette sales to minors, or the sale of single cigarettes would be eligible for the reward—assuming the alleged perpetrator is caught.

In 2015 the city started a "Taste of Toxins" campaign to highlight the dangers of tobacco products besides cigarettes, including hookahs and e-cigarettes. That summer, Chicago held its second annual Smoking Cessation Awareness Week. In December 2015 the city council passed an ordinance doubling the fine on retailers who sell unstamped tobacco products.

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Chicago has gone after e-cigarettes in a big way under the theory that, at least for young people, they are a gateway drug to combustible cigarettes and are helping "re-normalize" smoking. The City Council passed a tax on ecigarette liquid, placed e-cigarettes under its Clean Indoor Act Ordinance, and launched an anti-vaping campaign with its own hashtag: #VapingTruth.

On March 16, 2016, the Council approved more anti-tobacco measures: new taxes on cigars, smokeless tobacco, and pipe and smoking tobacco—in a bid to bring their prices in line with cigarettes—and a ban on tobacco coupons and discounts.

And in perhaps its most serious anti-youth smoking initiative yet, it banned the sale of cigarettes and smokeless tobacco products to anyone younger than age twenty-one. The goal, said the city's public health commissioner, Dr. Julie Morita, is to move "one step closer to creating Chicago's first tobacco-free generation."

Framework Convention on Tobacco Control

In 2005 the WHO's Framework Convention on Tobacco Control (FCTC) went into effect. The first worldwide health treaty, the FCTC aims to combat the global tobacco epidemic by committing parties to the convention to implement a set of evidence-based measures that will curb both tobacco use and exposure to tobacco smoke, including the use of pricing and taxes. The United States is a signatory to the treaty, but unlike almost every other country in the world, it has not ratified the agreement, so it is not yet bound by its provisions.

The WHO later released a set of six recommendations that make up the acronym MPOWER to help countries meet their FCTC obligations. The acronym's last letter stands for "raising" taxes on tobacco; the WHO had defined its best-practice excise tax rate for this recommendation at a minimum of 70 percent of the final cost of the product.

In a 2015 study, however, the WHO concluded that this goal was the least implemented of the six recommendations, which also include measures such as banning smoking in public places and improving package warning labels. According to the study, only 10 percent of the world's population lives in one of the thirtythree countries where the tax on a pack of cigarettes represented 75 percent of the pack's total cost. In the United States, federal and state excise taxes, on average, accounted for 44.1 percent of the retail price of a pack of cigarettes in 2015—far short of the WHO's best-practice goal.

WHAT'S THE DEBATE?

Few people argue that the state and federal government should not tax tobacco. According to the Campaign for Tobacco-Free Kids, national and state opinion polls have "consistently shown broad voter support" for tobacco tax increases.

If simply raising revenue is the ultimate goal, there is a theoretical maximum tax that would raise the most money; further price hikes after that would result in such a precipitous decline in tobacco purchases that tax revenues would start to decline. But that would be a tax increase well above current levels; in practice, tobacco taxes continue to be a popular and highly effective revenue raiser.

If the ultimate goal is to create a smoke-free society, one might follow the Australian model, in which cigarettes are taxed at some of the highest rates in the world, in conjunction with a host of other anti-smoking measures, including strong warning labels, standardized plain packaging, and vigorous smoke-free policies. In May 2016 the Australian government announced plans to continue its annual 12.5 percent excise tax hike for another four years, until 2021, at which point a pack of cigarettes would cost about AUS\$40, or US\$30. The current price in Australia, the equivalent of about US\$20, is double what it was in 2010. The Australian Treasury estimates that the increasing tax would mean a gain of some AUS\$4.7 billion by 2019–20, offsetting any decline in the smoking rate.

The smoking rate in Australia among people ages eighteen and older has dropped from about 25 percent in the early 1990s to around 13 percent today. Meanwhile, in nearby New Zealand, there is also a formal policy to become smoke-free by 2025—defined as a population where fewer than 5 percent of people smoke.

According to the <u>National Health Interview</u> <u>Survey of 2015</u>, the US smoking rate for adults ages eighteen and older dropped to about 15.2 percent from 16.8 percent the year before, although that figure masks big regional differences. More than one in four adults smoke in West Virginia and Arkansas, for example,

85%

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while in California the figure, at 11.7 percent, is less than half that.

Problems with higher excise taxes

Although tobacco taxes are a highly effective way to raise revenue and cut smoking rates, there are myriad ways they can be undermined by consumers and the tobacco industry alike.

At a March 2, 2016, address to the Society for Research on Nicotine and Tobacco, Frank Chaloupka of the University of Illinois at Chicago listed five behavioral changes by smokers in response to higher cigarette taxes that could mute the taxes' impact:

• "Downtrading" to cheaper branded generics

• Moving to a different, less heavily taxed, tobacco product

• Using more price-reducing promotions offered by tobacco companies. ("We know times are tough, so we'd like to help," reads one promotional offer from the Philip Morris company, published after the 2009 federal tax hike. "We invite you to register at Marlboro .com to become eligible for cigarette coupons and special offers.")

• Buying cigarettes in larger quantities for multipack discounts

• Evading the tax by buying black-market cigarettes or by traveling to a less heavily taxed jurisdiction to buy cigarettes.

As of January 1, 2014, forty-seven states and the District of Columbia used cigarette tax stamps. But only three used high-tech stamps that were nearly impossible to counterfeit. The problem is real. A study published online in 2012 in the journal Tobacco Control found that 58 percent of cigarette packs found on the ground in New York City, where they'd been littered, had either no tax stamp or a counterfeit tax stamp. And the problem was worse in poorer neighborhoods, which indicates that tobacco excise taxes were being evaded in larger numbers than in wealthier areas. The implication is clear: By providing easier access and cheaper cigarettes to poor people, the illicit cigarette trade makes the already-big health disparities between poor and better-off communities even greater.

The positive health benefits of tobacco excise taxes can also be undermined by individuals who simply choose to smoke fewer cigarettes instead of stopping altogether. While that might reduce the total amount they spend on cigarettes, they are still smoking enough to have a negative health impact.

The biggest impediment to raising taxes to a level that would drop the US smoking rate to even lower levels is the tobacco industry. Some 85 percent of tobacco industry advertising and promotional expenditures go toward price discounts, according to the Federal Trade Commission. And while certain jurisdictions such as Providence, Rhode Island, and New York City have banned multipack discounts and coupon redemptions-moves that have so far been upheld by the courts-that is far from the norm. In addition, state and local laws that require a high minimum-price floor remain rare. In part, that is attributable to the tobacco industry's powerful lobbying presence on Capitol Hill and in the various statehouses, and its often significant campaign donations to federal and state lawmakers.

The tobacco industry and others often argue that tobacco taxes are regressive, imposing a far higher financial burden on poor people, who also smoke at far higher rates. According to 2014 Centers for Disease Control and Prevention (CDC) data, 26.3 percent of people below the poverty level smoke cigarettes some days or every day, while the comparable figure for those at or above the poverty level is 15.2 percent.

Using data from adjusted, self-reported cigarette consumption among people in New York State, a 2012 article in *PLOS One* reported that people with annual incomes of less than \$30,000 spent 11.6 percent of their household income on cigarettes in 2003–04 and 23.6 percent of their income in 2010–11. During that period, the New York State cigarette excise tax increased from \$1.50 to \$4.35. For households earning \$60,000 or more, the comparable figures were 1.9 percent in 2003–04 and 2.2 percent in 2010–11.

The study's authors suggested that using some of the tobacco tax revenue for targeted programs to help low-income smokers quit "may help alleviate the regressivity of cigarette excise taxes."

In fact, the combined state anti-smoking budgets in fiscal year 2015 totaled only half a billion dollars—far less than the \$3.3 bil-

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lion recommended by the CDC, according to Chaloupka's March 2 presentation. Data from the Campaign for Tobacco-Free Kids show that only five states are spending 50 percent or more of the CDC tobacco prevention recommendation in fiscal year 2016.

The flip side of the regressivity argument, others note, is that because tobacco tax increases have a disproportionate impact on both the financial and physical well-being of poor people, they also have consequentially greater benefits if poor people quit.

Differential taxing

The WHO's "best practices" in tobacco taxation say taxes should be applied equally on all products so people are not tacitly encouraged to switch to "cheaper brands or products."

Others take the opposite view, arguing that moving smokers from combustible tobacco products—cigarettes, cigars, cigarillos, and hookah tobacco—to lower-risk options makes more sense from a public health viewpoint. These low-risk options include low-nitrosamine smokeless tobacco—such as the moist Swedish tobacco product snus, which has about a tenth the risk of cigarettes—and, according to some researchers, electronic nicotine delivery systems such as e-cigarettes.

Supporters of differential pricing like to point to Sweden, where lower taxes encouraged many men to give up cigarettes and switch to snus. Swedish men have a higher rate of tobacco consumption than men in most other Western countries, but their cigarette smoking rate is the lowest for men in Europe. Their death rate attributable to tobacco use is also the lowest for men in any EU country.

The concept of differential pricing remains controversial in the United States, especially when it comes to e-cigarettes. Many public health officials believe e-cigarettes should be taxed at the same rate as combustible cigarettes since there is exploding use among young people and mounting evidence that e-cigarettes are more harmful than had first been believed.

WHAT'S NEXT?

The proper taxation rate for e-cigarettes remains a major question in tobacco-control circles and hinges on whether one believes they ultimately are a net plus or a net minus for public health.

Although many states have considered taxing e-cigarettes, as of mid-2016, according to the Campaign for Tobacco-Free Kids, only six states—Kansas, Louisiana, Minnesota, North Carolina, West Virginia, and Pennsylvania, whose tax goes into effect on October 1, 2016 and seven cities and counties had passed laws to tax e-cigarettes. In North Carolina the tax, which was promoted by the locally based tobacco giant R.J. Reynolds, is negligible, a nickel per milliliter of consumable nicotine liquid. In Minnesota it's at the same 95 percent rate applied to other tobacco products.

Meanwhile, the Obama administration has proposed an increase of 94 cents in the federal cigarette excise tax in its latest budget for fiscal year 2017, the same amount it has recommended for the past few years. The additional tax would raise almost \$100 billion over ten years to fund early childhood education programs. There's little chance the Republicancontrolled Congress will act on the proposal.

States and municipalities remain the most fertile ground for additional cigarette taxes, which as of the summer of 2016 averaged \$1.65 a pack. Tobacco taxes retain widespread bipartisan public support and provide states with one of the few ways to raise revenue that does not spark blanket opposition. Just this year alone, West Virginia more than doubled its tax on a pack of cigarettes effective July 1, 2016, from 55 cents to \$1.20, while Pennsylvania's tax jumped by one dollar to \$2.60 a pack beginning August 1, 2016. ■

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RESOURCES

Centers for Disease Control and Prevention, <u>Trends</u> in State and Federal Cigarette Tax and Retail Price— <u>United States, 1970–2014</u> (Baltimore, MD: CDC, 2016).

Frank J. Chaloupka, David Sweanor, and Kenneth E. Warner, <u>"Differential Taxes for Differential Risks—</u> <u>Toward Reduced Harm from Nicotine-Yielding</u> <u>Products,</u>" *New England Journal of Medicine* 373, no. 7 (2015): 594–7.

Frank J. Chaloupka, Ayda Yurekli, and Geoffrey T. Fong, <u>"Tobacco Taxes as a Tobacco Control Strategy,"</u> *Tobacco Control* 21, no. 2 (2012): 172–80.

Matthew C. Farrelly, James M. Nonnemaker, and Kimberly A. Watson, <u>"The Consequences of High</u> <u>Cigarette Excise Taxes for Low-Income Smokers,"</u> *PLoS One* 7, no. 9 (2012): e43838. David T. Levy, Elizabeth A. Mumford, K. Michael Cummings, Elizabeth A. Gilpin, Gary Giovino, Andrew Hyland, David Sweanor, and Kenneth E. Warner. <u>"The Relative Risks of a Low-Nitrosamine</u> <u>Smokeless Tobacco Product Compared with Smoking</u> <u>Cigarettes: Estimates of a Panel of Experts,"</u> Cancer Epidemiology, Biomarkers & Prevention 13 (2004): 2035-42.

Orzechowski and Walker, *The Tax Burden on Tobacco* (Arlington, VA: Orzechowski and Walker, 2015).

World Bank, <u>Curbing the Epidemic—Governments and</u> <u>the Economics of Tobacco Control</u> (Washington, DC: World Bank, May 31, 1999).

World Health Organization, <u>WHO Report on the Global Tobacco Epidemic, 2015: Raising Taxes on Tobacco</u> (Geneva: WHO, 2015).