



**SCIENTIFIC EVIDENCE ON THE IMPACT OF PRICE ON THE BURDEN OF TOBACCO USE**

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**The Public Health Burden of Tobacco Use**

- Cigarette smoking and exposure to secondhand smoke are responsible for approximately 480,000 deaths each year in this country—or about one in every five deaths—making smoking the single most preventable cause of death and disease in the United States.<sup>1</sup>
  - Since the publication of the first Surgeon General’s report on the health effects of smoking in 1964, cigarette smoking has been causally linked to diseases of nearly all organs of the body.<sup>1</sup> And since 1964, more than 20 million premature deaths can be attributed to cigarette smoking.<sup>1</sup>
- In addition to this enormous health burden, smoking also imposes a major economic burden on society, costing the nation more than \$300 billion each year, including nearly \$170 billion for direct medical care of adults and more than \$156 billion from lost productivity due to premature death.<sup>1,2</sup>

**The Impact of Price on Tobacco Use**

- The Institute of Medicine, Surgeon General, and World Health Organization all agree that increasing the price of tobacco products is the single most effective way to reduce tobacco consumption.<sup>1,3,4</sup>
- The 2014 Surgeon General’s report, *The Health Consequences of Smoking—50 Years of Progress*, concluded that, “the evidence is sufficient...that increases in the prices of tobacco products, including those resulting from excise tax increases, prevent initiation of tobacco use, promote cessation, and reduce the prevalence and intensity of tobacco use among youth and adults.”<sup>1</sup> Overall, raising tobacco prices leads to improvements in health outcomes.<sup>5,6,7</sup>
- Specifically, the 2000 report of the U.S. Surgeon General, *Reducing Tobacco Use*, concluded that a 10 percent increase in the price of cigarettes is associated with a 3–5 percent reduction in cigarette consumption—and this reduction can be even greater among youths and other price-sensitive groups, such as people living below the poverty level.<sup>8,9,10,11</sup>
- Furthermore, to maximize public health benefits, it is also important that state comprehensive tobacco control programs are funded at the CDC-recommended levels outlined in the 2014 *Best Practices for Comprehensive Tobacco Control Programs*.<sup>12</sup> Some states have chosen to dedicate a portion of tobacco sales revenue to tobacco prevention and control efforts, with positive health outcomes and cost-savings.<sup>12,13,14,15</sup>
- There are a number of additional factors that influence the price of tobacco products, including:
  - Excise taxes on tobacco products,
  - Price parity between different types of tobacco products,
  - Tobacco industry practices that affect price,
  - Strategies to prevent and reduce tobacco tax avoidance and evasion, and
  - Minimum price policies.

## **Excise Taxes on Tobacco Products**

- The 2014 Surgeon General’s Report found that, “although many factors affect the final price of cigarettes and other tobacco products, the most important policy-related determinant of tobacco prices is excise taxes on tobacco products.”<sup>1</sup>
- The variation of excise taxes between states is large.
  - As of May 2015, the Federal tax on cigarettes was \$1.01 per pack and the national state average for cigarette excise taxes was \$1.54 per pack, ranging from \$4.35 in New York to 17 cents per pack in Missouri.<sup>16</sup>
  - Many localities can also implement excise taxes above and beyond state and federal excise taxes. Combined with the Cook County and Illinois state excise tax, Chicago currently has the highest excise tax in the nation, at \$6.16 per pack of cigarettes.<sup>17</sup>
- Overall, “higher taxes have decreased consumption of tobacco products, especially cigarettes, and thereby improved public health.”<sup>1</sup>
- It is important to note, however, that unless excise taxes are increased regularly, the inflation-adjusted value of the tax will fall over time, and subsequently, the effect of the excise tax on the price of tobacco products.<sup>5</sup>
  - The 2014 Surgeon General’s report, notes that our, “understanding of price elasticity suggests that the average retail price of cigarettes in the United States across the country would need to be raised to at least \$10 a pack to have a large and rapid impact on health.”<sup>1</sup>
- Furthermore, as noted above, dedicating portions of tobacco sales revenue to tobacco prevention and control efforts can produce both health gains and cost-savings.
  - For instance, when California increased its state excise tax by \$0.25 per pack in 1988, approximately \$0.05 per pack was dedicated to tobacco prevention programs.
  - The California tobacco control program has yielded a \$55:\$1 return on investment from 1989 to 2008, and its lung cancer incidence is declining four times faster than the rest of the country.<sup>12,15</sup>
- Overall, tobacco control programs are considerably underfunded, especially compared to the revenue states receive from tobacco product sales (including excise tax revenue and Master Settlement Agreement payments).<sup>12,18</sup>
  - Noting the potential benefits of dedicated tobacco control funding is important because, as noted in the 2014 Surgeon General’s Report, “there is concern that the dramatic drop in funding for tobacco control programs, which has occurred concurrently with a dramatic increase in tax-related revenue to states, may not be entirely coincidental. Although increases in price from excise taxes still make money for a state despite decreased consumption, fiscal agencies in states may not perceive the same relationship between increased funding for effective tobacco control programs and state revenues. Although long-term reductions in smoking may lower state expenditures for health care, this is a much less tangible effect than the immediate loss of tax and [Master Settlement Agreement] revenue from a significant decline in cigarette consumption due to a tobacco control program effect.”<sup>1</sup>

## **Price Parity between Different Types of Tobacco Products**

- In most states, different tobacco products are taxed at different rates.<sup>19</sup> In addition to other market factors, these different tax rates translate into different prices for different products, which, in turn, influence consumer behavior.

- Cigarettes remain the most commonly consumed tobacco product in the United States.<sup>1</sup> However, cigarette sales are declining, whereas in contrast, sales of moist snuff, cigars, and pipe/roll-your-own tobacco have increased slightly in recent years.<sup>1</sup> The increase in sales of roll-your-own/pipe tobacco is attributed to cigarette smokers seeking less expensive cigarettes, due to the fact that loose tobacco for roll-your-own is often taxed at a lower rate than manufactured cigarettes (at both the state and federal level).<sup>1,20,21</sup>
- The 2014 Surgeon General’s Report found that in 2009, the federal excise tax equalized the tax between cigarettes and little cigars, but created other tax exemptions.<sup>1</sup>
  - For instance, many tobacco companies slightly increased the weight of some of their cigar products, which, for tax classification purposes, shifted them from the ‘little cigar’ to the more favorable ‘cigar’ taxation category. Although these are essentially the same product, the price differential due to this tax exemption resulted in a “dramatic, immediate increase in large cigar use over a 2-month period.”<sup>1</sup>
  - Moist snuff consumption among both current and former cigarette smokers has also increased due to a number of factors, including increasing cigarette prices.<sup>22</sup>
- These examples of the relationship between price and consumption illustrate the importance of establishing pricing parity between different types of tobacco products to discourage users from simply switching between tobacco products—which does not result in health benefits—and encourage users to quit completely.<sup>1</sup>
- Price parity can also ensure that all tobacco products—not just cigarettes—are priced in such a way that discourages youth initiation.<sup>1</sup>
  - This is the approach taken by two states in 2013, Massachusetts and Minnesota, which updated their approach to tobacco product taxation to better address changes in consumption, especially by youth.<sup>23</sup>

### **Tobacco Industry Practices that Affect Price**

- The tobacco industry has developed “extremely sophisticated” ways to mitigate the effects of price increases (including Web-based, mail-order, brand repositioning, and store-based discounting timed to scheduled price increases).<sup>5,24</sup>
  - After the 1998 Master Settlement Agreement, tobacco manufacturers shifted their marketing approach from traditional media advertising to price-related promotions.<sup>5,25,26,27,28</sup>
  - In 2012, the most recent year for which data are available from the Federal Trade Commission, the tobacco industry spent \$7.8 billion out of a \$9.17 billion marketing budget, or 85.1 percent of their marketing budget, on price discounts.<sup>29</sup>
  - These pricing promotions currently include incentive payments for tobacco retailers and wholesalers to reduce the price of cigarettes to customers (known as buy-downs or off-invoice discounts), coupons, and retail value-added promotions (e.g., buy one, get one free offers).
- The 2012 U.S. Surgeon General’s report found that in recent years, the pricing of tobacco products has become a key marketing strategy for the tobacco industry.<sup>5</sup> “Price-reducing promotions have been the primary means of price competition among manufacturers, and there is evidence that these promotions have been targeted to specific brands or venues that are more important to young people.”<sup>5</sup> These promotions undermine the effectiveness of a powerful policy lever to stop youth and young adults from starting or continuing to use tobacco.
- Discounts such as direct mail coupons, point-of-sale coupons, and “buy some, get some” offers are particularly appealing to young people.<sup>30</sup>
  - One study found that 35 percent of cigarette smokers ages 18 to 24 reported that they “always” take advantage of discount and multi-pack coupons when purchasing cigarettes.<sup>30</sup>

- Adult heavy smokers who smoke 15 cigarettes or more a day are also much more likely to use price-minimization strategies, including discounts, rather than quitting.<sup>24</sup>
- Researchers estimate that if pricing schemes were banned across the United States, the number of current, established smokers would decrease by over 13 percent.<sup>31</sup> The 2012 U.S. Surgeon General’s report concluded that “the industry’s extensive use of price-reducing promotions has led to higher rates of tobacco use among young people than would have occurred in the absence of these promotions.”<sup>35</sup>
- Some communities have successfully implemented policies that prohibit the redemption of tobacco product discounts and coupons at retailers in their jurisdiction—specifically, New York, New York and Providence, Rhode Island.<sup>32,33</sup>
  - Evaluations of the impact of these policies on health outcomes are ongoing.

### **Strategies that Prevent and Reduce Tobacco Tax Avoidance and Evasion**

- Higher tobacco prices have a significant, positive impact on public health, particularly in preventing youth initiation of tobacco use.<sup>5</sup> Illegal tobacco sales, in their many forms, directly undermine this impact. However, there are a number of ways all levels of government can address these sales to maintain the public health benefits of higher tobacco prices.
- According to the 2014 U.S. Surgeon General’s report, tax avoidance and evasion, also known as illicit tobacco trade, “occurs along a continuum of individual and group behaviors. Tax avoiders at both the individual and group levels pay some local, state, and federal taxes, whereas tax evaders do not.
  - Tax avoidance activities include individual cross-border, Internet, and untaxed purchases on tribal lands, as well as consumer behaviors such as product switching, carton purchases, and using cheaper outlets. Individuals and small-scale organizations also bootleg cigarettes in lower tax jurisdictions for resale in higher tax jurisdictions.
  - Tax evasion includes illegal activities often conducted by large-scale organizations, such as organized smuggling, counterfeiting, and illegal manufacturing.”<sup>1</sup>
- Although these behaviors may undermine the effectiveness of higher prices on reducing tobacco consumption and preventing initiation—especially among youth—the International Agency for Research on Cancer concluded that there is sufficient evidence that tax avoidance and evasion reduce, but do not eliminate the public health and revenue impact of tobacco tax increases.<sup>7</sup>
- Furthermore, there are a number of approaches that states and localities can take to reduce illegal sales and enhance revenue collection.
  - For example, two states—California and Massachusetts—have implemented high-tech tax stamps on their cigarette packages, which report encrypted information on payments to the state’s revenue collection agency. Electronic data collection and reporting has a number of benefits, such as more consistent monitoring of tax and Master Settlement Agreement payments and improved tobacco licensure management.<sup>1</sup>
  - For instance, after California implemented its high-tech tax stamp and increased illicit trade enforcement efforts, the state saw a 37 percent drop in cigarette tax evasion, which also resulted in \$110 million in additional annual cigarette tax revenue collected.<sup>34</sup> The state estimates that due to this high-tech tax stamp, 101 million more packs are sold through legal distribution channels every year instead of illegally, valued at over \$87 million per year.<sup>35</sup>
- States can also reduce tax avoidance and evasion by improving their enforcement of illegal tobacco sales and negotiating compacts with tribal governments to ensure excise tax collection.<sup>36</sup>
  - Related to tribal sales, Oklahoma established a compact with the Muscogee Nation, which established an agreement for the Nation to pay the state \$11.5 million over five years to compensate for lost state excise tax revenue.

## **Minimum Price Policies**

- Some researchers have suggested that another way to ensure higher prices on tobacco products is to implement a minimum price policy, where no tobacco product in a specific jurisdiction could be sold for less than a specified amount.<sup>37</sup>
- In 2010, CDC reported that 24 states and the District of Columbia had implemented minimum price laws.<sup>38</sup>
  - However, most of these laws were enacted in the 1940s and 1950s with the intent to help small retailers compete by preventing unfair business practices such as loss leader sales—selling cigarettes at a loss to lure customers into the store; not to improve public health.<sup>38,39</sup> Further analysis indicates that these laws alone do not create higher prices in these states.<sup>39,40</sup>
- Rather, most of these states still allow the discounting and couponing practices illustrated above, which undermine the minimum price policy.<sup>40</sup> Therefore, it is important to consider how minimum price policies will be impacted by other pricing policies, and thereby demonstrate public health impact.

## **Conclusion**

- There is scientific evidence that higher prices on tobacco products translate into reduced initiation, reduced tobacco consumption, and increased cessation —thereby improving public health. In addition to examining the health impact of higher excise taxes, it is also important to consider comprehensive approaches to pricing policy.

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