

# Tobacco Harm Reduction 101

An estimated 30.8 million American adults smoked in 2020, or approximately 12.5 percent of the U.S. population.[1] Smoking-related disease and deaths cost the United States more than \$300 billion each year, including \$225 billion attributed to medical costs and more than \$156 billion due to lost productivity.[2]

For many years, policymakers have staunchly pushed forward with only one approach: quit or die. This failed method of smoking prevention and cessation has negligibly reduced smoking rates over the years. Yet, there is another approach: tobacco harm reduction for those who are unwilling or unable to quit smoking. In 1976, famed tobacco research Michael Russell remarked “people smoke for the nicotine, but die from the tar.”[3] Today, cigarettes contain nearly 600 ingredients and when ignited release more than 7,000 chemicals in the tobacco smoke, including 69 which are known to cause cancer.[4]

Nicotine, while not benign, is not responsible for causing cancer or the other ill effects caused by combustible cigarette smoke. In fact, the U.S. Food and Drug Administration,[5] the Centers for Disease Control and Prevention,[6] and the American Cancer Society[7] all acknowledge that nicotine has addictive properties but is not responsible for the harms caused by various tobacco products.

Given that nicotine itself is not the harm-causing property of tobacco, consumers and manufacturers have moved forward with giving adults the options to try and switch to less harmful tobacco products, otherwise known as tobacco harm reduction.

Tobacco harm reduction takes into account the science and the individual, all the while reducing the harms related to cigarette smoking. Rather than shaming persons addicted to nicotine, tobacco harm reduction offers them an opportunity to use a less harmful product, while delivering nicotine in a manner that is effective at reducing their cravings.

Reduced harm tobacco products include: electronic cigarettes/vaping devices, heated tobacco products, nicotine replacement therapy, and smokeless and snus products. These products deliver nicotine to adult consumers in a manner that is significantly less harmful than combustible cigarettes. Moreover, there is a plethora of evidence to their reduced risks.

- **E-Cigarettes:** Despite media alarmism, e-cigarettes are significantly less harmful than combustible cigarettes, as noted by numerous public health agencies. In 2015, Public Health England found e-cigarettes to be 95 percent less harmful than combustible cigarettes.[8] In 2021, the agency noted that “vaping is positively associated with quitting smoking successfully.”[9] In 2016, the UK Royal College of Physicians declared that e-cigarettes were unlikely to exceed five percent of the harms that are caused by smoking.[10] Not only does the UK government subsidize e-cigarettes as a cessation tool for people who smoke, vape shops can be found in hospitals in the country. In the United States, in 2018, of the estimated 10 million vapers, approximately 3 million had previously used combustible cigarettes.[11] In 2021, the FDA, through a new regulatory pathway, authorized the first e-cigarette product, finding that the product is “significantly less toxic than combusted cigarettes” and “could benefit addicted adult smokers who switch ... by reducing their exposure to harmful chemicals.”[12]
- **Heated Tobacco:** The US FDA has not only allowed for the marketing of a heated tobacco product, the manufacturer has been permitted to market it with a reduced risk claim, including that due to the product heating tobacco and not burning it, the process “significantly reduces the production of harmful and potentially harmful chemicals.”[13] While the rollout in America has been limited (and currently hindered by a patent dispute), in other countries, heated tobacco products have been linked to significant reductions in adult smoking rates. A 2020 study by the American Cancer Society remarked that heated tobacco products “likely reduced cigarette sales in Japan.”[14]

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- **Nicotine pouches:** Nicotine pouches are used the same way as snus but deliver nicotine via infused fillers like plant-based fibers instead of pasteurized tobacco. They are the newest innovation on the nicotine market and they are as or less harmful than snus. As a result, they have been rising in popularity across the world. For example, a May 2022 study assessed the potential effect of nicotine pouches if introduced in the U.S. in 2000. The study estimated there would have been about 700,000 fewer deaths by 2050.
- **Nicotine Replacement Therapy (NRT):** NRT is the most endorsed form of tobacco harm reduction and is subsidized by federal and state health care quit-smoking programs. NRT includes gums, patches, lozenges, and prescription medication. Studies have found that similar rates of cessation success among users of various NRT products and smokeless and snus products.[15] Other tobacco harm reduction products have been found to be more effective. For example, a 2019 randomized controlled trial found that e-cigarettes were almost twice as effective as NRT in aiding in smoking cessation.[16]
- **Smokeless:** Smokeless tobacco poses much lower risks than smoking, all while containing nicotine. A 2009 Biomed Central study analyzed 89 studies of smokeless tobacco use and cancer finding “very little evidence” of smokeless tobacco producing elevated cancer risks.[17] A 2011 review of epidemiologic studies found that snus and smokeless tobacco use to be “99% less hazardous than smoking.”[18]
- **Snus:** Snus is an oral moist tobacco often used in pouches. It originated in Sweden and has been part of the country’s “tobacco culture” for more than a century. Snus has been directly linked to reducing smoking rates in the country. Swedish men, who have the highest rate of smokeless tobacco use in Europe and the lowest smoking rate, “also have the lowest rates of lung cancer and other smoking-related diseases in Europe.”[19] Further, a 2020 long-term study of Swedish snus users that were former smokers concluded that over “80% found snus of great importance to succeed with smoking cessation.”[20]

As cigarettes remain available, it is imperative that policymakers offer the consumers access to less harmful tobacco products. Policymakers should avoid excessive regulations, unfair taxation, and outright prohibition when enacting policies regarding novel tobacco harm reduction innovations. Lawmakers should put forth policies that both inform consumers of the wide variety of less harmful products, as well as allow the market to introduce products that are effective at both delivering nicotine in a less harmful manner and reducing smoking rates.

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