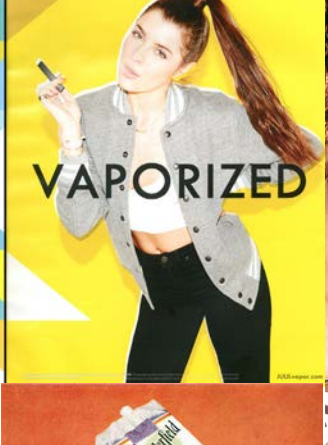
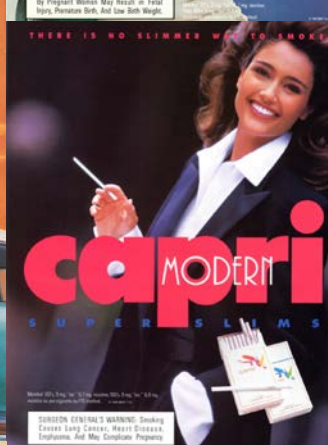


# A LIFETIME OF DAMAGE



How Big Tobacco's predatory marketing harms the health of women and girls

May 2021



# OUR PARTNERS





# EXECUTIVE SUMMARY

The tobacco industry has a long history of developing cigarette brands and marketing campaigns that target women and girls, with devastating consequences for women's health. The industry's deliberate and aggressive targeting of women and girls spans a century, utilizing themes of beauty, fashion, freedom and sophistication – and often playing into sexist tropes – while ignoring or downplaying that tobacco use causes serious health harms at all stages of a woman's life.

Smoking harms nearly every organ of the body and affects a person's overall health.

**More than 16 million women and girls in the United States currently smoke, putting them at risk for the serious and deadly diseases caused by smoking.** Over 200,000 women die in the U.S. every year due to smoking and exposure to secondhand smoke. In addition, youth e-cigarette use has skyrocketed to what the U.S. Surgeon General and the Food and Drug Administration have called “epidemic” levels, with nearly 1 in 5 high school girls now using e-cigarettes.

This report **details the tobacco industry's history of predatory marketing, which has lured and addicted millions of women and girls to tobacco products, and the resulting harmful consequences for women's health that occur over their lifespans.** This report demonstrates that strong action is needed now to protect women's health and save lives, and offers proven solutions to prevent young girls from starting to smoke or vape and help all women quit.

## THE TOBACCO INDUSTRY'S PREDATORY MARKETING TARGETS WOMEN AND GIRLS

Tobacco's devastating impact on women is the direct result of decades of targeted marketing by the tobacco industry. Tobacco companies have a long history of exploiting the aspirations, body image concerns and perceived insecurities of women and girls

to sell them addictive and deadly products. From gendered marketing a century ago to new products and slick campaigns today, the tobacco industry has harmed generations of women through their marketing and lies about tobacco use.

Tobacco companies have long understood the importance of recruiting women and girls as customers, and extensive market research on the attitudes of women has helped tobacco companies better understand how to target their products and advertise to this important group of potential customers. In the same way that tobacco companies have aggressively targeted Black Americans with campaigns for menthol cigarettes, they have long targeted women with specific brands and campaigns that use themes of beauty, sophistication, weight loss, fashion and freedom that continue today.

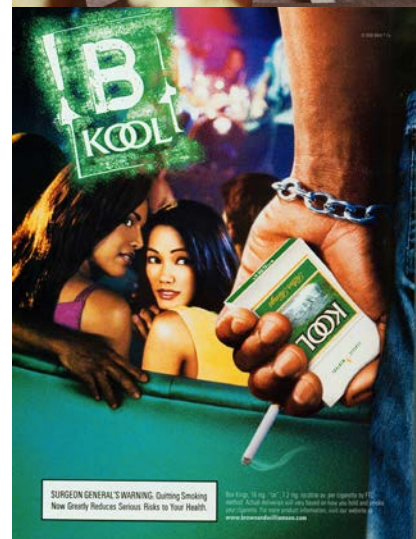
Launched with marketing directed at women in the 1920s, Marlboro's debut tagline, “Mild as May,” portrayed smoking as feminine, complete with greaseproof tips to protect lipstick from smudging. A 1920s ad for Lucky Strike cigarettes urged women to “Reach for a Lucky instead of a sweet” – marketing the cigarette as a diet aid led to a more than 300% increase in the brand's sales in the first year of the advertising campaign.

By the 1960s, cigarette companies had gone so far as co-opting the women's liberation movement. In 1968, Philip Morris introduced Virginia Slims, the first woman-specific brand to hit the market. With the iconic slogan, “You've come a long way, baby,” the Virginia Slims marketing campaign cynically appropriated the themes and goals of the women's liberation movement to sell a product that would result in addiction, disease and death for millions of women.

Not long after the advent of women-specific brands, tobacco companies began to aggressively market “low tar” and “light” cigarettes



the bold and the blu-tiful



# EXECUTIVE SUMMARY CONTINUED

as safer options and an alternative to quitting smoking. Women quickly switched to the new “light” and “low tar” cigarettes in an effort to reduce their health risk. The tobacco companies continued to market these products despite being well aware that the health claims implied in their ads were misleading or entirely false – the new cigarettes did not provide any health benefit.

Tobacco companies constantly innovate to recruit more smokers. Recent decades shepherded in “designer” cigarettes for “the most fashion forward woman” and compact “purse packs” to fit in smaller, trendy handbags. They also continued aggressive, targeted marketing toward women of color, with multiple campaigns featuring multiethnic models placed in magazines popular with young African Americans and Hispanics.

The digital age has brought new products and new tactics, but the marketing still echoes themes common in the tobacco industry’s long history of targeting women and girls. Marketing shifted from magazine pages to online, using special parties and events, social media influencers and curated photo backdrops created for women to share the new brands with their own friends and social media networks. E-cigarette products like Juul and blu as well as newer products like Philip Morris’ IQOS heated cigarette are marketed using the same themes that have been used for decades by the tobacco industry to target women and girls with harmful and addictive products.

## THE DEVASTATING CONSEQUENCES FOR WOMEN’S HEALTH

These marketing campaigns have had a staggering impact on the health of women and girls, and the latest campaigns continue to draw in new customers and perpetuate the danger to women’s health.

Tobacco use causes serious health harm

throughout a woman’s entire life. It can lead to nicotine addiction for young girls, impact a woman’s ability to become pregnant and cause serious pregnancy complications. Smoking is also a primary cause of deadly and debilitating chronic diseases and causes serious health harms later in life.

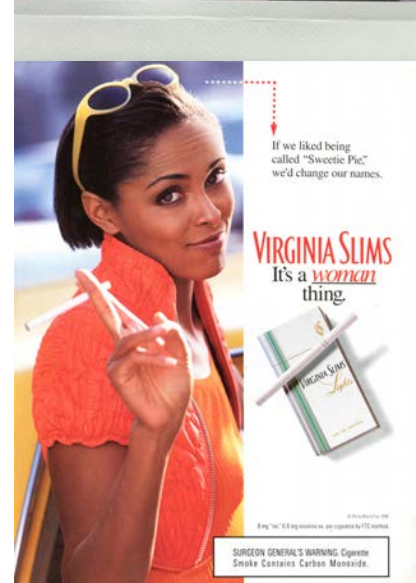
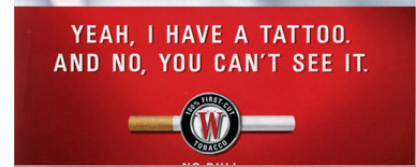
Nicotine exposure and tobacco use at a young age can have lasting damaging consequences for young girls – 90% of adult smokers begin smoking while in their teens or earlier; and two-thirds become regular, daily smokers before they reach the age of 19.

Youth e-cigarette use in the United States has skyrocketed to what the U.S. Surgeon General and the FDA have called “epidemic” levels – and many kids aren’t just experimenting with e-cigarettes, but use them frequently, an indicator of serious addiction.

Smoking and exposure to secondhand smoke are harmful for reproductive health – while also affecting a baby’s health before and after birth. Tobacco use during pregnancy remains a major preventable cause of disease and death of fetus, infant and mother. The harm caused by maternal smoking can last throughout childhood and teenage years.

Smoking puts women at increased risk for heart disease, lung cancer, stroke, emphysema and many other serious chronic illnesses. The risks to women from smoking have risen sharply over the last 50 years and are now equal to those for men for lung cancer, chronic obstructive pulmonary disease and cardiovascular diseases. **For the first time ever, women who smoke are as likely as men to die from many of the diseases caused by smoking.**

Smoking continues to affect women as they age. Smoking is a major risk factor for Alzheimer’s disease, osteoporosis and age-related macular degeneration (AMD) that can lead to blindness.





# EXECUTIVE SUMMARY CONTINUED

## LOOKING FORWARD

### Quitting smoking is one of the best things women can do for their health.

Women are highly motivated to quit – approximately 70% of women smokers are interested in quitting and each year, 55% make a quit attempt. But nicotine is a powerfully addictive drug. Quitting is hard and it often takes multiple attempts before it sticks.

To create better health outcomes, it is imperative that policymakers implement solutions to help women and girls quit smoking, and prevent young people from ever starting to use tobacco products. These actions will benefit women and girls for decades to come. Our solutions include:

- 1. Expanding the availability and promotion of smoking cessation treatments.** Comprehensive, barrier-free tobacco cessation coverage can give tobacco users the best chance to quit successfully. These services must be widely promoted so health care providers and tobacco users know they are available.
- 2. Ensuring women receive advice to quit from their health care providers.** Health care providers play a vital role in helping their patients quit using tobacco – even brief advice to quit from a health professional is shown to make it more likely that a patient will try and ultimately succeed in quitting.
- 3. Eliminating all flavored tobacco products, including menthol cigarettes, will help prevent girls and young women from using these products.** By masking the harshness and increasing the appeal of tobacco, flavors make it easier for new users—particularly youth—to try tobacco products and ultimately become addicted. Menthol also makes cigarettes more addictive and harder to quit. The FDA recently took a major step forward by announcing that it will initiate rulemaking to prohibit menthol cigarettes and flavored cigars.
- 4. Implementing proven policy solutions including cigarette tax increases, well-funded tobacco prevention and cessation programs, and comprehensive smoke-free workplace laws, which reduce smoking and protect everyone from exposure to secondhand smoke.** These policy measures are proven to be effective at preventing young people from starting to use tobacco products, helping smokers quit and protecting non-smokers from secondhand smoke.

For decades, the tobacco industry has targeted women and girls with aggressive marketing campaigns while obfuscating the truth about tobacco's impact on their health. By exploiting women's aspirations and desires, and preying on image concerns and perceived insecurities, tobacco companies have addicted millions of women and girls to products that are killing them. The industry's deliberate targeting has had a destructive impact on women's health. Now, strong action is needed to protect the health – and lives – of women and girls.

Marketing images courtesy of Stanford Research into the Impact of Tobacco Advertising and TrinketsandTrash.org. Additional images courtesy of the Centers for Disease Control and Prevention (CDC).



# WOMEN & TOBACCO BY THE NUMBERS

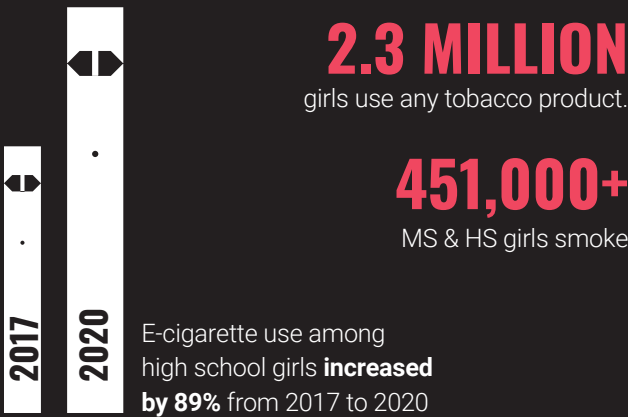


Female smokers are **significantly more likely** to use menthol cigarettes than men



**43.5%**

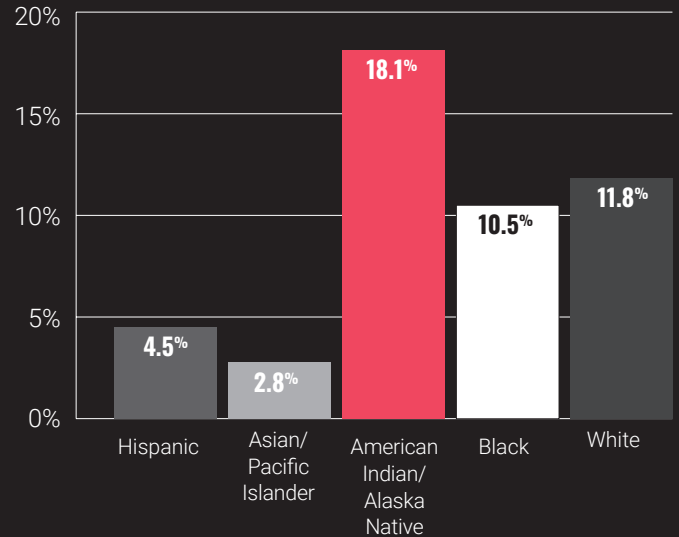
of women smokers use menthol cigarettes



**1 in 5 nonsmoking women** are exposed to secondhand smoke

Exposure for Black women is **twice as high.**

## SMOKING RATES AMONG WOMEN - BY ETHNICITY



nearly **1 in 5** high school girls use e-cigarettes

**\$71.2 BILLION**

Health costs to treat female smokers per year, nationally

**200,000+**

women die each year from smoking and secondhand smoke exposure

Smoking reduces a woman's life expectancy by at least

**10 YEARS**

**3.7 MILLION**

women smoke at some point during pregnancy



## A LIFETIME OF HEALTH HARMS

### **TOBACCO HAS A DEVASTATING IMPACT ON WOMEN & GIRLS AT ALL AGES**

Tobacco companies have long understood the importance of women and girls in the overall market for cigarettes and other tobacco products. Extensive market research has helped tobacco companies better target their products and advertising to this important group of potential customers. In the same way that tobacco companies have aggressively targeted Black Americans with campaigns for menthol cigarettes, they have also targeted women with brands and campaigns that use themes of beauty, sophistication, weight loss, fashion and freedom that continue today. More recently, we have seen newer products like Juul and blu e-cigarettes and Philip Morris' IQOS heated cigarette marketed utilizing the same themes used for decades by the tobacco industry to target women and girls with harmful and addictive products.

The consequences of the tobacco industry's targeted marketing campaigns are staggering. Smoking harms nearly every organ of the body and affects a person's overall health. More than 16 million women and girls in the United States currently smoke, putting them at risk for lung cancer, heart attacks, strokes, emphysema and other deadly diseases caused by smoking. Over 200,000 women die in the United States every year due to smoking and exposure to secondhand smoke. In addition, youth e-cigarette use has skyrocketed to what the U.S. Surgeon General and the FDA have called "epidemic" levels, and nearly 1 in 5 high school girls now use e-cigarettes.

Smoking and other tobacco use cause serious health harms throughout a woman's entire life. Smoking and vaping can lead to nicotine addiction for young girls. Smoking can impact a woman's ability to become pregnant and cause serious pregnancy complications. Smoking is a primary cause of heart disease, cancer and stroke and causes serious health harms later in life – smoking is a risk factor for Alzheimer's disease, osteoporosis and age-related macular degeneration (AMD) that can lead to blindness.

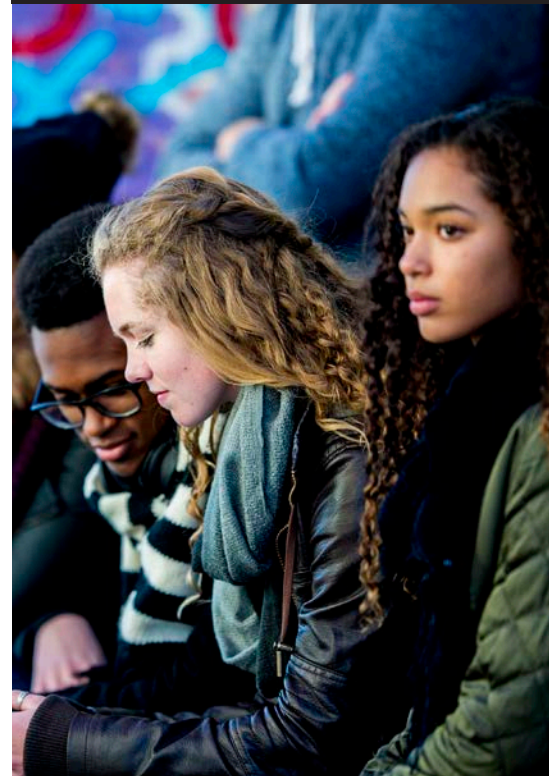


# ADOLESCENCE

## TOBACCO USE ALMOST ALWAYS STARTS IN ADOLESCENCE AND CAN HAVE SERIOUS, DEADLY CONSEQUENCES.

*Nicotine exposure and tobacco use at a young age can have lasting damaging consequences for young girls.*

- ▶ 90% of adult smokers begin smoking while in their teens, or earlier; two-thirds become regular, daily smokers before they reach the age of 19. <sup>1</sup>
- ▶ Youth e-cigarette use in the United States has skyrocketed and 3.6 million middle and high school students currently use e-cigarettes. <sup>2</sup>
- ▶ Kids are not just experimenting with e-cigarettes. An increasing proportion of youth e-cigarette users are using e-cigarettes frequently, an indicator of serious addiction. <sup>3</sup>
- ▶ Studies have shown that young people who use e-cigarettes are more likely to become cigarette smokers. <sup>4</sup>
- ▶ The most popular e-cigarette products, like Juul, deliver massive doses of nicotine, putting youth users at greater risk of addiction. <sup>5</sup>
- ▶ Nicotine is a highly addictive drug that can have lasting and damaging effects on adolescent brain development – the brain keeps developing until about age 25. In particular, nicotine use can harm the parts of the adolescent brain responsible for attention, learning, mood and impulse control. The Surgeon General concluded, “The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe.” <sup>6</sup>
- ▶ Adolescent girls who smoke have reduced rates of lung growth, meaning their lungs may never fully develop or perform at full capacity. This damage is permanent and increases the risk of chronic obstructive pulmonary disease (COPD) later in life. <sup>7</sup>
- ▶ Young girls who smoke are in danger of early cardiovascular damage. Smoking narrows blood vessels, putting added strain on the heart. <sup>8</sup>
- ▶ Secondhand smoke can cause health problems in children: <sup>9</sup>
  - Young girls exposed to secondhand smoke are more likely to get ear infections, experience certain breathing problems like wheezing and coughing and get bronchitis and pneumonia.
  - Secondhand smoke can trigger an asthma attack in a child.
  - Children exposed to secondhand smoke miss more days of school compared to those who are not exposed. <sup>10</sup>





# REPRODUCTIVE YEARS

## SMOKING CAUSES GREAT HARM TO REPRODUCTIVE HEALTH.

*Smoking and exposure to tobacco smoke are harmful to reproductive health. Smoking can also affect pregnancy and a baby's health after birth. Tobacco use during pregnancy remains a major preventable cause of disease and death of the fetus, infant and mother. The harm caused by maternal smoking can last throughout childhood and teenage years.*

- ▶ Women who smoke are more likely to have menstrual problems, including painful periods, irregular bleeding, missed periods and early onset menopause.<sup>11</sup>
- ▶ Smoking can make it harder to become pregnant and women who smoke have a higher risk of never becoming pregnant.<sup>12</sup>
- ▶ Smoking increases the risk for pregnancy complications, including miscarriage and ectopic pregnancy. Ectopic pregnancy is a condition that is rarely survivable for the fetus and potentially fatal for the mother.<sup>13</sup> Smoking also causes complications with the placenta, the organ through which nutrients pass from mother to fetus. These complications can jeopardize the life and health of both the mother and the child.<sup>14</sup>
- ▶ Smoking increases the risk for premature delivery, stillbirth, low birthweight and infant mortality.<sup>15</sup> One in five babies born to mothers who smoke has low birthweight. Low birthweight and preterm delivery are leading causes of infant disability and death.<sup>16</sup>
- ▶ Smoking during pregnancy and exposure to secondhand smoke increases the risk of sudden infant death syndrome (SIDS).<sup>17</sup> Babies whose mothers smoke are about three times more likely to die from SIDS.<sup>18</sup>

- ▶ Maternal smoking can damage a baby's developing lungs and brain. This damage can last through childhood into the teen years.<sup>19</sup>
- ▶ Maternal smoking can result in cleft lip and/or cleft palate. Babies with a cleft lip or cleft palate can have problems with feeding, hearing and speech development.<sup>20</sup>
- ▶ Maternal smoking increases the risk of health and behavioral problems in infants and children, including: abnormal blood pressure, childhood leukemia, infantile colic, childhood wheezing, respiratory disorders, eye problems, intellectual disability, attention deficit disorder, behavioral problems and other learning and developmental problems.<sup>21</sup>
- ▶ Mothers who are exposed to secondhand smoke while pregnant are more likely to have lower birthweight babies. Babies who are exposed to secondhand smoke have weaker lungs than other babies, increasing the risk for several health problems.<sup>22</sup>
- ▶ Overall, 6.0% of pregnant women smoke. Smoking varies greatly across racial/ethnic populations. For example, 14.6% of American Indian/Alaskan Native pregnant women smoke, 8.8% of White pregnant women smoke, 4.8% of Black pregnant women smoke, and 1.5% of Hispanic pregnant women smoke.<sup>23</sup> Smoking is higher among pregnant women with lower levels of education.<sup>24</sup>

**Babies whose mothers smoked during pregnancy or who are exposed to secondhand smoke during pregnancy after birth are more likely to die of sudden infant death syndrome (SIDS) than are babies who are not exposed.**



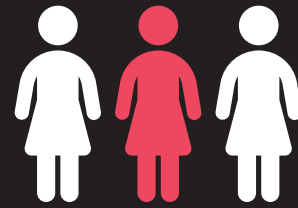
# MIDLIFE

## SMOKING IS A PRIMARY CAUSE OF SERIOUS CHRONIC DISEASES AMONG WOMEN.

Smoking puts women at increased risk for heart disease, lung cancer, stroke, emphysema and many other serious chronic illnesses. Women smokers' risk levels have risen sharply over the last 50 years and are now equal to those for men for lung cancer, chronic obstructive pulmonary disease and cardiovascular diseases. For the first time ever, women who smoke are as likely as men to die from many of the diseases caused by smoking.

### HEART DISEASE AND STROKE

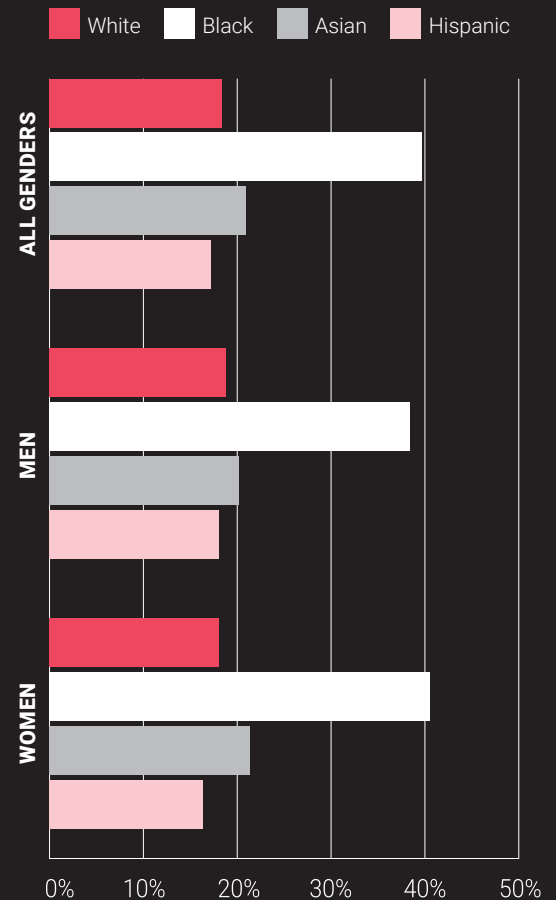
- ▶ Smoking is a leading cause of cardiovascular diseases, including coronary heart disease, atherosclerosis and stroke. One in three deaths in women are from heart disease and stroke.<sup>25</sup>
- ▶ Each year, over 60,000 women die of smoking-caused cardiovascular diseases.<sup>26</sup>
- ▶ American Indian/Alaska Native women have a higher risk of tobacco-caused disease and death due to their high smoking rates. Among AI/AN women, smoking causes 18% of ischemic heart disease deaths, 13% of other heart diseases deaths, and 20% of stroke deaths, compared with 9%, 7%, and 10%, respectively, among White women.<sup>27</sup>
- ▶ Smoking damages the heart in numerous ways. Smoking causes an instant increase in blood pressure and heart rate. It also damages blood vessels and increases the risk for blood clots, which can block blood flow to the heart and brain and result in heart attacks and strokes.
- ▶ Heart disease affects women of all ages and is the leading cause of death for women. Among women 35 years of age and older, the risk of dying from heart disease is now higher than men.<sup>28</sup>
- ▶ Cigarette smokers are 2 to 4 times more likely to get heart disease than nonsmokers.<sup>29</sup>
- ▶ Cigarette smoking doubles a person's risk for stroke. Stroke kills more than 80,000 women every year and is the third leading cause of death for women. About 60% of all stroke deaths occur in women.<sup>30</sup> Among women, Black women have the highest prevalence of stroke.<sup>31</sup>
- ▶ Women also face unique cardiovascular risks as a result of smoking. Women who smoke and use oral contraceptives are at increased risk for stroke and heart attack.<sup>32</sup>
- ▶ Exposure to secondhand smoke can cause heart disease and stroke in nonsmokers.<sup>33</sup> Black women have the highest levels of exposure to secondhand smoke. 40.5% of Black women are exposed to secondhand smoke compared to 21.4% of Asian women, 18.1% of White women and 16.4% of Hispanic women.<sup>34</sup>



**1 IN 3 DEATHS IN WOMEN ARE FROM CARDIOVASCULAR DISEASE AND STROKE.**

CDC

## SECONDHAND SMOKE EXPOSURE AMONG NONSMOKING MEN AND WOMEN, BY RACE/ETHNICITY



National Center for Health Statistics, National Health and Nutrition Examination Survey, 2015-2018



## RESPIRATORY DISEASES

- ▶ Cigarette smoking is the primary cause of chronic obstructive pulmonary disease (COPD), a deadly chronic disease which damages a person's airways, blocks airflow and causes breathing-related problems. COPD includes emphysema and chronic bronchitis.<sup>35</sup>
- ▶ Nearly 90% of COPD cases are caused by smoking. Women smokers in certain age groups are 38 times as likely to develop COPD compared to women who have never smoked.<sup>36</sup>
- ▶ More women than men have COPD; women develop COPD at a younger age (often between 45 and 64) and appear to be more susceptible to developing severe COPD at younger ages.<sup>37</sup>
- ▶ Smoking causes the vast majority of all deaths from COPD among women. More than 50,000 women die every year from COPD. Death from COPD has risen sharply in recent decades, and now more women than men die from COPD each year.<sup>38</sup>
- ▶ Smoking makes chronic lung diseases like asthma and bronchitis more severe.<sup>39</sup>
- ▶ Smoking increases the risk for respiratory infections.<sup>40</sup>
- ▶ COVID-19 attacks the lungs and is an especially serious threat to those who smoke. According to the Centers for Disease Control and Prevention (CDC), smokers face an increased risk for severe illness from COVID-19.<sup>41</sup>



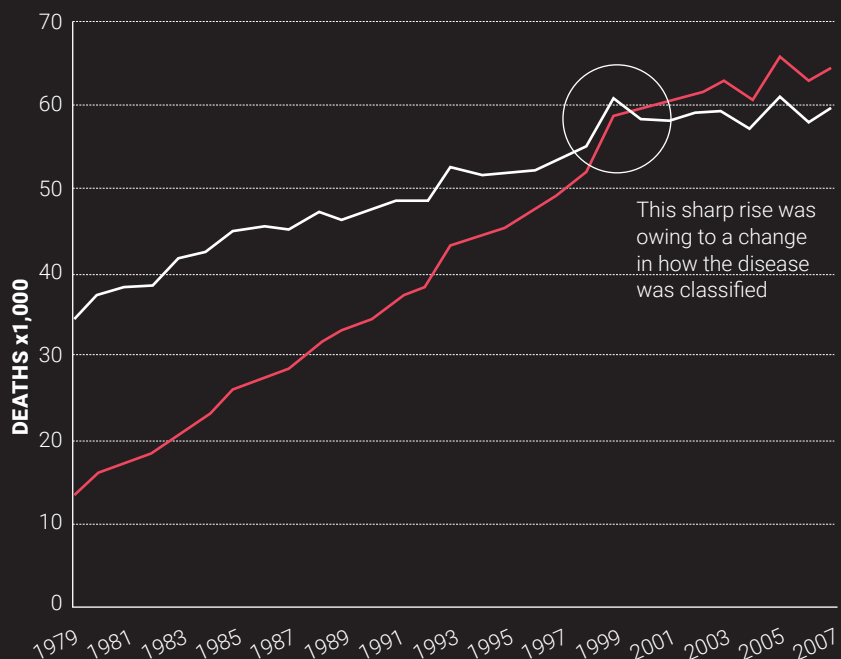
**Gerri M, age 58, Michigan;  
diagnosed with COPD at age 44**

*"If I can help even one person to quit, then I've turned my curse into a blessing."*

CDC, *Tips from Former Smokers* participant

## DEATHS DUE TO CHRONIC OBSTRUCTIVE PULMONARY DISEASE AMONG ADULT MEN AND WOMEN, 1979–2007, UNITED STATES

— Male — Female



Source: Dance 2012. Reprinted with permission from MacMillan Publishers Ltd. 2012.

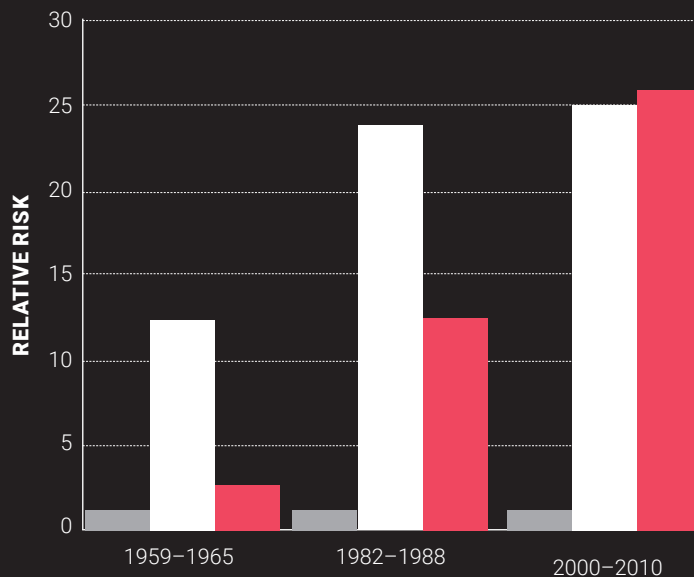
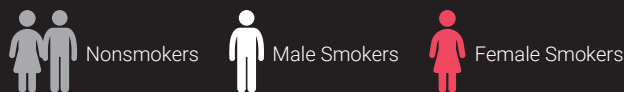
## CANCER

- ▶ Smoking can cause cancer almost anywhere in your body. Smoking causes cancer of the lung, larynx, oral cavity, bladder, liver, pancreas, kidney, colon and rectum, stomach, blood and esophagus. Smoking is associated with an increased risk of cervical cancer.<sup>42</sup>
- ▶ Each year, more than 275,000 women are diagnosed with a tobacco-related cancer, and more than 145,000 will die.<sup>43</sup>
- ▶ More women die from lung cancer than any other cancer. In 1987, lung cancer surpassed breast cancer to become the leading cause of cancer death among women.<sup>44</sup>
- ▶ Smoking causes 80% of all lung cancer deaths among women.<sup>45</sup> An estimated 62,000 women will die from lung cancer in 2021.<sup>46</sup>
- ▶ Lung cancer is the leading cause of cancer death among Black women, causing 20% of all cancer deaths.<sup>47</sup>
- ▶ The risk for developing lung cancer has risen dramatically among women smokers over the last several decades. Between 1959 and 2010, the risk of lung cancer to smokers more than doubled for men but increased tenfold for women. The risk increased despite the fact that the prevalence of smoking and the number of cigarettes consumed per smoker decreased over the same time period. The U.S. Surgeon General Report on The Health Consequences of Smoking concluded that changes in the design and contents of cigarettes over the last 50 years have contributed to the increased risk.<sup>48</sup> Specifically, tobacco companies introduced cigarettes with ventilated filters to produce lower levels of tar and nicotine in machine tests and marketed these cigarettes as less hazardous. Millions of women switched to low tar cigarettes thinking they were protecting their health. In reality, the evidence now shows that these cigarettes did not reduce health risks and likely increased smokers' risk of lung cancer. Tobacco companies also increased the levels of tobacco-specific nitrosamines, a potent carcinogen, in American cigarettes, which also likely contributed to increased lung cancer risk.

## DIABETES

- ▶ Approximately 16 million women in the United States have diabetes.<sup>49</sup> The risk of developing diabetes is 30-40% higher for cigarette smokers than nonsmokers.<sup>50</sup> Smoking can also make diabetes harder to control.
- ▶ Smokers with diabetes have higher risks for serious health problems, including heart and kidney disease, poor blood flow in legs and feet that can lead to infections, and retinopathy, an eye disease that can cause blindness.<sup>51</sup>

## LUNG CANCER RISKS HAVE INCREASED DRAMATICALLY FOR WOMEN



Source: [https://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/pdfs/wynk-cancer.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/pdfs/wynk-cancer.pdf)



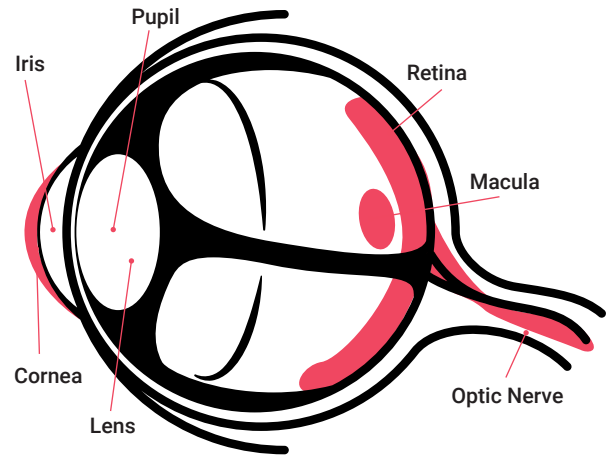
# OLDER YEARS

## THE RISK FOR SMOKING-CAUSED DISEASE CONTINUES AS WOMEN AGE.

While many people may know about the chronic diseases caused by smoking, smoking is also a risk factor for many health conditions that predominantly affect older individuals.

- ▶ Smoking is a risk factor for Alzheimer's disease,<sup>52</sup> which is the fifth leading cause of death for adults aged 65 years and older, and the sixth leading cause of death for all adults. In the US, an estimated 5.8 million people are living with Alzheimer's disease, and about two-thirds of them are women.<sup>53</sup>
- ▶ Women who smoke more cigarettes per day are more likely to develop cognitive impairment later in life.<sup>54</sup>
- ▶ Smoking can lead to serious eye conditions that cause vision loss or blindness. For example, smoking can cause age-related macular degeneration (AMD), an eye disease that affects one's ability to see objects clearly and can impact common everyday activities like reading and driving. AMD is the leading cause of blindness for people 65 and older in the United States.<sup>55</sup> Some studies indicate that heavy exposure to secondhand smoke may also increase the risk of AMD.<sup>56</sup>
- ▶ Smoking is a risk factor for bone loss and osteoporosis.<sup>57</sup> Smoking affects the body's ability to absorb calcium, leading to lower bone density and weaker bones. Postmenopausal women who smoke have weaker bones than women who have never smoked, and are at increased risk for broken bones.<sup>58</sup>
- ▶ Women who currently smoke also have an increased risk for hip fractures compared with women who never smoked.<sup>59</sup>
- ▶ Women who smoke can also experience menopause symptoms two to three years earlier than women who do not smoke.<sup>60</sup> Smoking can worsen menopause symptoms including anxiety, mood swings, sleep, and skin issues. For example, women who smoke have more hot flashes than women who do not.<sup>61</sup>
- ▶ Emerging research indicates that e-cigarette use has a negative effect on oral health. Nicotine impacts blood flow to the gums, and could lead to inflammation of the gums.<sup>62</sup> The chemicals in e-cigarettes also stay in one's mouth, and can soften tooth enamel and contribute to tooth decay.<sup>63</sup> Vaping also changes the balance of bacteria in the mouth in ways that put users at higher risk of oral infections.<sup>64</sup>

## A LOOK AT YOUR EYE



**Smoking causes age-related macular degeneration and cataracts, which are a major cause of adult blindness**

CDC



**Marlene K. smoked and started losing her vision at age 56. She's had dozens of shots in each eye to avoid further vision loss.**

***"Nothing at all—food, drink, cigarettes, nothing—is worth going through what I'm going through."***

CDC, *Tips from Former Smokers* participant

# QUIT FOR HEALTH

## QUITTING SMOKING HAS ENORMOUS HEALTH BENEFITS FOR WOMEN OF ALL AGES.

Quitting smoking is one of the best things women can do for their health. A woman's health starts to improve immediately after quitting smoking. But nicotine is a powerfully addictive drug. Quitting is hard and often takes multiple attempts before someone is able to succeed.

- ▶ Women are highly motivated to quit. Approximately 70% of women smokers are interested in quitting and 55% make a quit attempt each year.<sup>65</sup>
- ▶ While the benefits of quitting are greater at a younger age, quitting smoking has health benefits at any age.<sup>66</sup>
- ▶ Quitting smoking improves lung function and reduces the risk of lung infections.<sup>67</sup>
- ▶ Smokers who quit start to improve their heart health and reduce their risk for cardiovascular disease immediately.<sup>68</sup>
- ▶ Quitting smoking dramatically reduces the risk for a heart attack within one year.<sup>69</sup>
- ▶ A woman's risk of lung cancer is cut in half 10 years after quitting.<sup>70</sup>
- ▶ Women who quit smoking can see their risk of stroke drop to that of a woman who never smoked 5 years after quitting.<sup>71</sup>
- ▶ While scarring of the lungs is irreversible, quitting can prevent lung disease symptoms from worsening. Within two weeks of quitting, women start to breathe easier.<sup>72</sup>
- ▶ Women who quit smoking reduce their risk of dying from COPD.<sup>73</sup>
- ▶ Quitting smoking reduces the risk for cervical cancer within a few years.<sup>74</sup>
- ▶ Quitting smoking strengthens women's bones and muscles and reduces the risk of fractures.<sup>75</sup>
- ▶ The heightened risk for delivering a low birthweight baby is reduced if a woman quits before becoming pregnant or in the first trimester.<sup>76</sup>
- ▶ For women undergoing cancer treatment, quitting also improves the body's ability to heal and respond to therapy.<sup>77</sup> Quitting smoking may also reduce the chance of cancer relapse among women in remission.<sup>78</sup>

## HEALTH BENEFITS OF QUITTING SMOKING



**IMPROVES** health and **INCREASES** life expectancy



**LOWERS** risk of 12 types of cancer



**LOWERS** risk of cardiovascular diseases



**LOWERS** risk of chronic obstructive pulmonary disease (COPD)



**LOWERS** risk of some poor reproductive health outcomes



**BENEFITS** people who have already been diagnosed with coronary heart disease or COPD



**BENEFITS** people at any age — even people who have smoked for years or have smoked heavily will benefit from quitting

[https://www.cdc.gov/tobacco/quit\\_smoking/how\\_to\\_quit/benefits/index.htm](https://www.cdc.gov/tobacco/quit_smoking/how_to_quit/benefits/index.htm)







# DECADES OF PREDATORY MARKETING

## **THE TOBACCO INDUSTRY HAS A LONG HISTORY OF TARGETING WOMEN AND GIRLS.**

Tobacco's devastating impact on women is the direct result of decades of targeted marketing by the tobacco industry. Tobacco companies have a long history of exploiting the aspirations, body image concerns and perceived insecurities of women and girls to sell them an addictive and deadly product.

Tobacco companies have long understood the importance of recruiting women and girls as customers. They have conducted extensive market research on the attitudes of women to better understand how to position their products and target their advertising. By focusing their research on how women view themselves, their aspirations and the social pressures they face, the tobacco companies have developed some of the most aggressive and sophisticated marketing campaigns in history for reaching and influencing women and girls. As detailed in the previous section, the consequences of these campaigns are staggering.



# IN THE BEGINNING

## THE EARLY YEARS OF TOBACCO TARGETING WOMEN

The tobacco industry's targeted marketing of women can be traced back to the 1920s, when many tobacco companies saw potential. "The tobacco industry realized that half of its potential customers were not even considering using cigarettes," noted Stanford University's Robert Jackler. "The industry actually began engineering ways of encouraging women to be willing to smoke in public."<sup>79</sup>

Launched with marketing directed at women in the 1920s<sup>80</sup>, Marlboro's debut tagline, "Mild as May," portrayed smoking as feminine. Cigarettes came with greaseproof tips to protect lipstick from smudging and the company later introduced red tips to hide lipstick marks on cigarettes.<sup>81</sup> Women smokers were hooked and Marlboro continues to be the top brand among both female and male smokers.<sup>82</sup>

From its earliest days, tobacco advertising geared towards women and girls sought to link smoking to slimness and weight control. A 1920s ad for Lucky Strike cigarettes urged women to "Reach for a Lucky instead of a sweet." Marketing Lucky Strike as a dieting and weight control aid led to a more than 300% increase in the brand's sales in the first year of the advertising campaign.<sup>83</sup>

During the World War II period, cigarette companies began to target women even more aggressively, using themes of fashion, beauty and sophistication that still continue today. Advertisements for Chesterfield cigarettes featured glamorous photographs of a "Chesterfield girl of the month," usually a fashion model or a Hollywood star such as Rita Hayworth, Rosalind Russell or Betty Grable.<sup>84</sup>

“The tobacco industry realized that half of its potential customers were not even considering using cigarettes. The industry actually began engineering ways of encouraging women to be willing to smoke in public.”

Dr. Robert Jackler, Stanford University,  
Founder of Stanford Research into the  
Impact of Tobacco Advertising (SRITA)



1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020s



# TAILORED TO WOMEN

## THE CREATION OF WOMEN-SPECIFIC BRANDS

Cigarette advertising continued to target women throughout the 1950s and reached new levels in the late 1960s. Realizing the impact that the women's liberation movement was having on the role of women in America, tobacco companies began to create cigarette brands specifically for women, with messaging to co-opt the movement.

In 1968, Philip Morris introduced Virginia Slims, the first ever woman-specific brand to hit the market. With the iconic slogan, "You've come a long way, baby," the Virginia Slims marketing campaign cynically appropriated themes and goals of the women's liberation movement – independence and empowerment – to sell a product that would result in addiction, disease and death for millions of women.<sup>85</sup>

Historical data from the National Center for Health Statistics show an abrupt increase in smoking initiation among girls under age 18 in the late 1960s – the same time advertisements for brands specifically targeted at women entered the market.<sup>86</sup> Six years after the introduction of Virginia Slims and other female-specific brands, the rate of smoking initiation of 12-year-old girls had increased by 110%. Increases among teenage girls were also substantial.<sup>87</sup>



1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020s



# THE DARK SIDE OF 'LIGHT'

## TARGETING WOMEN WITH "LIGHT" AND "LOW TAR" CIGARETTES

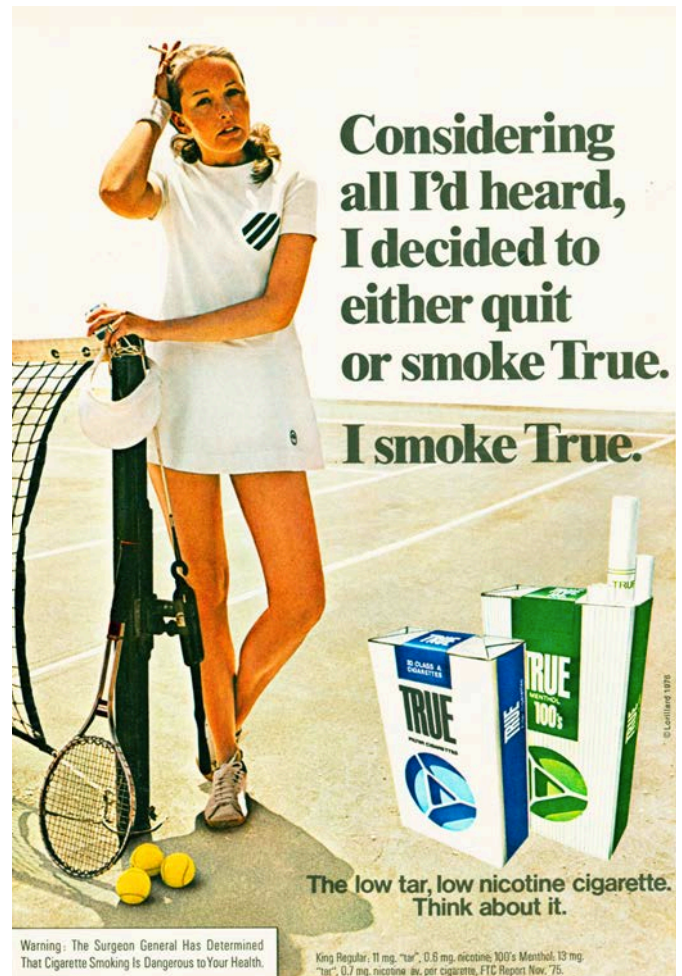
After the landmark 1964 Surgeon General's report connected smoking to cancer and other serious diseases, public apprehension about the health risks of smoking soared. The industry's answer was a scheme to provide false health assurances and get smokers to switch, not quit.

The tobacco companies began to aggressively market "low tar" and "light" cigarettes as a safer option. An example of this marketing strategy can be seen in Lorillard's True ad campaign from the 1970s which presented the low tar, low nicotine brand as an alternative to quitting smoking.

The tobacco companies knew that the strategy was working particularly well with women. A 1978 Philip Morris document noted that, "Today women make up the majority of low tar smokers. Almost half of all women have switched to a low tar cigarette." The company introduced Virginia Slims Lights to "capitalize" on the trend.<sup>88</sup>

The tobacco industry continued to market these products despite being aware that the health claims implied in their ads were either misleading or entirely false.<sup>89</sup> In 2001, the National Cancer Institute confirmed what the tobacco companies already knew: while changes in cigarette design reduced the amount of tar and nicotine measured by smoking machines, these machine measurements did not accurately show how much tar and nicotine is actually received by the smoker.<sup>90</sup> Smokers switching to "light" cigarettes compensated by smoking more, inhaling more deeply or blocking ventilation holes in cigarettes.<sup>91</sup>

Studies show that the introduction of "lights" may have led to increased incidence of disease caused by smoking, with a devastating effect on women's health.<sup>92</sup> Women were more likely than men to smoke mild, light, and ultra-light cigarettes.<sup>93</sup> Women were also more likely to say they switched to a low tar brand to reduce their health risk,<sup>94</sup> and smokers switching for that reason were ultimately less likely to quit smoking.<sup>95</sup>



In 2006 U.S. District Court Judge Gladys Kessler found that the 'light and low' deception was part of an industry pattern of illegality. Ruling in the civil racketeering lawsuit brought by the U.S. Department of Justice, Judge Kessler stated that the 'light' and 'low' scheme was intended to "keep smokers smoking; to stop smokers from quitting; to encourage people, especially young people, to start smoking; and to maintain or increase corporate profits."<sup>96</sup> As part of the 2009 law granting the Food and Drug Administration authority over tobacco products, Congress banned the use of the deceptive terms 'light,' 'mild' and 'low' tar in the marketing and sale of cigarettes.<sup>97</sup>

1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020s

# MARKETING TAKES OFF

## A PROLIFERATION OF WOMEN-TARGETED CAMPAIGNS

Philip Morris continued to market Virginia Slims using images of empowered women paired with the “You’ve come a long way, baby” slogan throughout the 1970s and 1980s. The copy on these ads usually focused on how women’s lives had changed since the 1920s and 1930s, highlighting the newfound freedoms of women.

Other women-specific brands, such as Misty (“slim ‘n sassy”) and Capri (“The Slimmest Slim!”), emerged and quickly adopted the same tactic of pairing a super slim cigarette with fun and flirty marketing images.

In 1999, Virginia Slims launched the lavish “Find Your Voice” ad campaign, which featured strikingly beautiful women from around the world and suggested that independence and allure could be achieved by smoking. The ads appeared in a wide variety of publications with predominantly female audiences, including Glamour, Ladies’ Home Journal, People, Essence, Vibe and Latina.

The advertising trade press dubbed the campaign “the first, concerted multicultural marketing effort for a cigarette, using a single theme interpreted in several ways for African American, Asian American, Hispanic and general-market women.” The company said the campaign was consistent with prior advertising for Virginia Slims, which “always celebrated woman and her role.”<sup>98</sup>

Health advocates and other critics were quick to decry the campaign. A Ms. Magazine editorial read, “They’ve long hitched their cancer sticks to women’s liberation with smarmy pitches like ‘You’ve come a long way, baby.’ Now Virginia Slims has set its sights on globalizing addiction and equalizing smoking-related illnesses. In their latest campaign . . . they issue a cynical, multicultural call to women to ‘find your voice.’”<sup>99</sup>

Philip Morris’ chief executive in June 2000 agreed to remove the “Find Your Voice” slogan after being questioned in the landmark Florida smokers’ trial about whether it might be offensive to smokers with throat cancer.<sup>100</sup>





# SMOKING AS FASHION

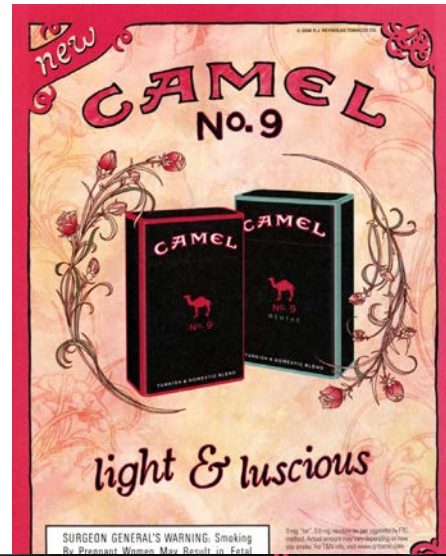
## THE “FASHION-FORWARD” CIGARETTES OF THE 2000s.

In January 2007, R.J. Reynolds (RJR) launched a new version of its Camel cigarette, called Camel No. 9, packaged in shiny black boxes with hot pink and teal borders, and a pink camel on each cigarette. The name evoked famous Chanel perfumes, and the marketing campaign associated the brand with romance, glamour and fashion.

The campaign launch included ads in *Vogue*, *Glamour*, *Cosmopolitan*, *Marie Claire* and *InStyle*. Camel No. 9 “ladies nights” were held in bars across the country, offering women facials, manicures, makeup and hair styling. Promotional giveaways included flavored lip balm, cell phone jewelry and tiny purses, all in hot pink. Subsequent advertising linked a thin version of the Camel No. 9 cigarette with vintage fashion. Ad text read “Now Available in Stiletto” and “Dressed to the 9s,” pitching the cigarette to “the most fashion forward woman.” RJR also solicited up-and-coming fashion designers to design limited edition cigarette packs and accessories.

The marketing campaign prompted the *Oregonian* newspaper to editorialize that R.J. Reynolds, which once marketed to kids with the now-banned Joe Camel cartoon character, was at it again with “Barbie Camel.”<sup>101</sup>

In October 2008, Philip Morris USA announced a makeover of its Virginia Slims brand into “purse packs” – small, rectangular cigarette packs that contain “superslim” cigarettes. Available in shades of pink and teal and half the size of regular cigarette packs, the sleek “purse packs” bore a striking resemblance to packages of cosmetics and fit easily in small purses. Direct mail marketing for the new Virginia Slims arrived in the shape of a clutch-style purse filled with colorful coupons for dollars-off packs of cigarettes.





# TARGETING MINORITIES

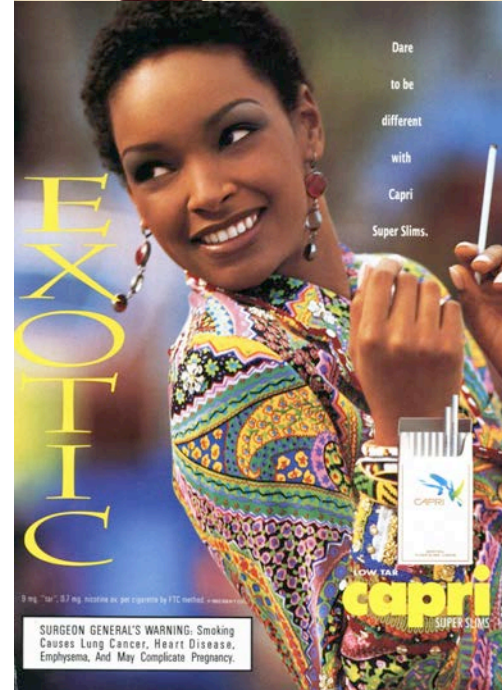
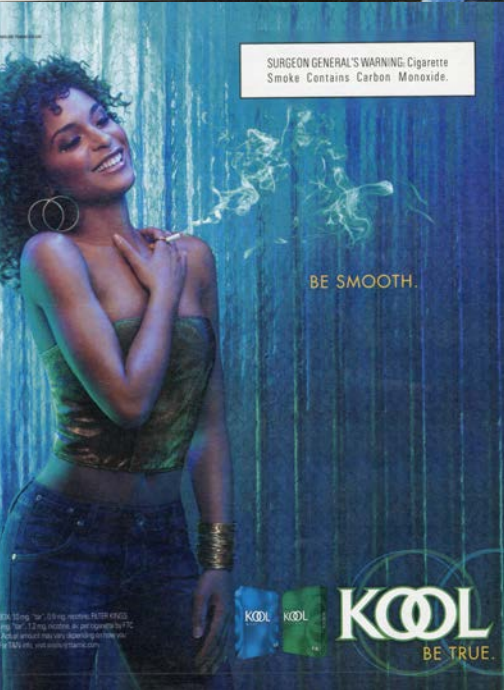
## ADVERTISING TARGETED TOWARD BLACK WOMEN AND LATINAS

According to the CDC, “tobacco products are advertised and promoted disproportionately to racial and ethnic minority communities.”<sup>102</sup> The tobacco industry has targeted Black women and Latinas with a broad range of marketing efforts, including sponsorship of community and music events, magazine advertising and retail promotions.

One of the first studies to analyze cigarette advertising in Black and Latino magazines found that, “the tobacco industry continues to target Blacks with menthol cigarette ads, appears now to be targeting Latinos similarly, and targets Black and Latino women with additional, tailored cigarette ads.”<sup>103</sup>

For example, in the 2000s R.J. Reynolds launched the “Kool Be True” music-themed campaign targeted at African American and Hispanic youth. The campaign featured ads with young, cool, multiethnic models and appeared in magazines popular with young African Americans and Hispanics.<sup>104</sup>

As these examples illustrate, ads targeted toward Black women and Latinas were part of the overall tobacco industry strategy to recruit new female customers, underscoring tobacco as an important health equity and racial justice issue.



1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020s



# KEEPING WOMEN HOOKED

LEAVE THE BULL BEHIND

**Winston**

Hostile takeover

No additives in our tobacco does **NOT** mean a safer cigarette.

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

LIGHTS BOX: 9 mg. "tar", 0.8 mg. nicotine, av. per cigarette by FTC method.  
 BOX: 13 mg. "tar", 1.1 mg. nicotine, av. per cigarette by FTC method.  
 For more product information, visit [www.wjft.com](http://www.wjft.com)

No additives in our tobacco does **NOT** mean a safer cigarette.

Winston Lights Box 9 mg. "tar", 0.8 mg. nicotine, av. per cigarette by FTC method.

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

UNTIL I FIND A REAL MAN, I'LL TAKE A REAL SMOKE.

NO ADDITIVES. NO SHEET. NO BULL.

CAMEL

PLEASURE To BURN

CAMEL LIGHTS

11 mg. "tar", 0.9 mg. nicotine av. per cigarette by FTC method. Actual amounts may vary depending on how you smoke. For 100% tips, visit [www.platinum.com](http://www.platinum.com).

SURGEON GENERAL'S WARNING: Quitting Smoking Now Greatly Reduces Serious Risks to Your Health.

SINCE 1913

## THE IMPORTANCE OF WOMEN SMOKERS ACROSS ALL BRANDS

With the success of these women-specific brands and marketing campaigns, the tobacco companies fully recognize the importance of women and girls as a key to their future profits. The targeting of women goes far beyond women-specific products like Virginia Slims. Indeed, the best-selling brands – Marlboro and Newport – rely on female smokers for a significant part of their market share. Marlboro and Newport are the top two brands among girls aged 12-17, young women, and older women.<sup>105</sup>

**Newport pleasure!**

© Lorillard 2009

Newport, Newport Menthol, Newport Lights, Newport Lights Double Menthols, Newport Pleasure, and Newport Summer are Lorillard Licensing Company LLC, Reg. U.S. Pat. & TM Off.

Lights Box: 9 mg. "tar", 0.7 mg. nicotine, av. per cigarette by FTC method.  
 Double Menthols Box: 11 mg. "tar", 1.3 mg. nicotine, av. per cigarette by FTC method.  
 Summer Box: 10 mg. "tar", 1.2 mg. nicotine, av. per cigarette by FTC method.

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

Finest Quality Menthol!

SALEM

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

GREEN LABEL FULL FLAVOR 18 mg. "tar", 1.3 mg. nicotine av. per cigarette by FTC method. For more product information, visit [www.wjft.com](http://www.wjft.com).

Visit [saalemaccess.com](http://saalemaccess.com). Website restricted to smokers 21 or older.

stir the senses



# MARKETING FOR THE DIGITAL AGE

## NEW PRODUCTS, NEW TACTICS, SAME INSIDIOUS TARGETING OF WOMEN AND GIRLS

The tobacco companies are constantly innovating. The digital age has brought new products and new tactics, but the marketing still echoes themes common in the tobacco industry's long history of targeting women and girls.

E-cigarettes have quickly become a popular product among youth. A recent Surgeon General's report found that "E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches that have been used in the past for marketing conventional tobacco products to youth and young adults."<sup>106</sup>

By continuing the tobacco industry's strategies, including celebrity endorsements, TV and magazine advertisements, and sports and music sponsorships, e-cigarette advertising has effectively reached young people. Like decades of cigarette advertising before it, marketing for e-cigarettes promote familiar themes of rebelliousness, fun and sex appeal.

These strategies have worked. Data from the CDC found that in 2019, more than 70% of girls in middle school and high school had been exposed to e-cigarette advertisements.<sup>107</sup>

Tobacco and e-cigarette companies have also used social media to promote their products. E-cigarette companies market extensively through product websites and developed a strong presence on social media sites popular among youth.<sup>108</sup> Companies also recruit social media influencers and celebrities to expand their online presence, host parties and events with selfie stations, and encourage partygoers to post about the product. Many of the influencers have strong networks in fashion, music, and entertainment, with large followings on social media. Additionally, user-generated posts with product specific hashtags (e.g., #JUULvapor, #doit4JUUL) have been widespread on social media, increasing youth exposure to pro-e-cigarette imagery and messaging.<sup>109</sup>

**The following examples show how three new products are continuing the tobacco industry's history of innovative marketing to target women and girls.**



Cigar maker Swisher Sweets gifted rapper Cardi B custom branded boots after she performed a sold-out show for the Swisher Sweets Artist Project. The company re-posted the images multiple times in the months after the event on various social media platforms.



Cardi B shared a thank you video to Swisher Sweets for her custom boots. Her Instagram post quickly reached an audience of more than 8 million people to help promote the sweet, flavored cigars.





# NEW PRODUCTS CONTINUED



## JUUL

When Juul first launched its e-cigarettes in 2015, the company used colorful, eye-catching designs, many of which featured young women dancing and using Juul. Juul's original marketing campaign included billboards in New York City's Times Square, YouTube videos, advertising in Vice Magazine, launch parties and a sampling tour. One Juul print ad showed a model with a long, high ponytail holding a Juul, evoking comparisons to teen popstar Ariana Grande. These images portrayed Juul as cool, social and fun, targeting young women who may want to fit in.

Social media played a major role in Juul's popularity. Juul often invited influencers to its launch parties and sampling events around the country. A U.S. House of Representatives hearing revealed that Juul had several contracts with Grit Creative Group to identify influencers to represent Juul on social platforms. Influencers would post images on social media of themselves using a Juul and incorporating it into their daily life in order to attract a broader audience to the product.



# NEW PRODUCTS CONTINUED

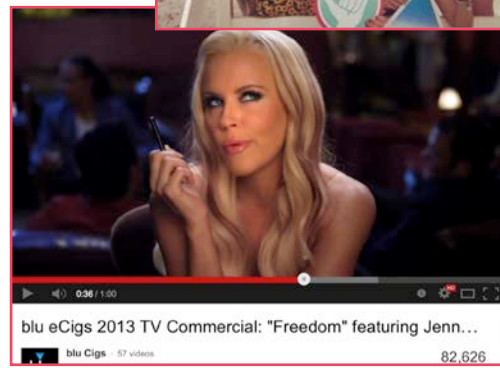
## BLU

When blu e-cigarettes launched, marketing depicted the product as a sleek accessory, encouraging women to “smoke in style.” Early ads often included messages of freedom and showed images of stylish women using blu with captions such as, “Freedom never goes out of fashion” and to “Take back your freedom with blu.” In blu’s early days of marketing, the company portrayed users of the e-cigarettes as trendy, cool and glamorous.

In 2013, blu partnered with celebrity Jenny McCarthy in a national television and online ad campaign. Building on previous marketing themes, McCarthy pitched blu as allowing her to take back her freedom and improve her confidence while dating, highlighting that she was able to enjoy blu anywhere without smelling like an ashtray.<sup>110</sup>

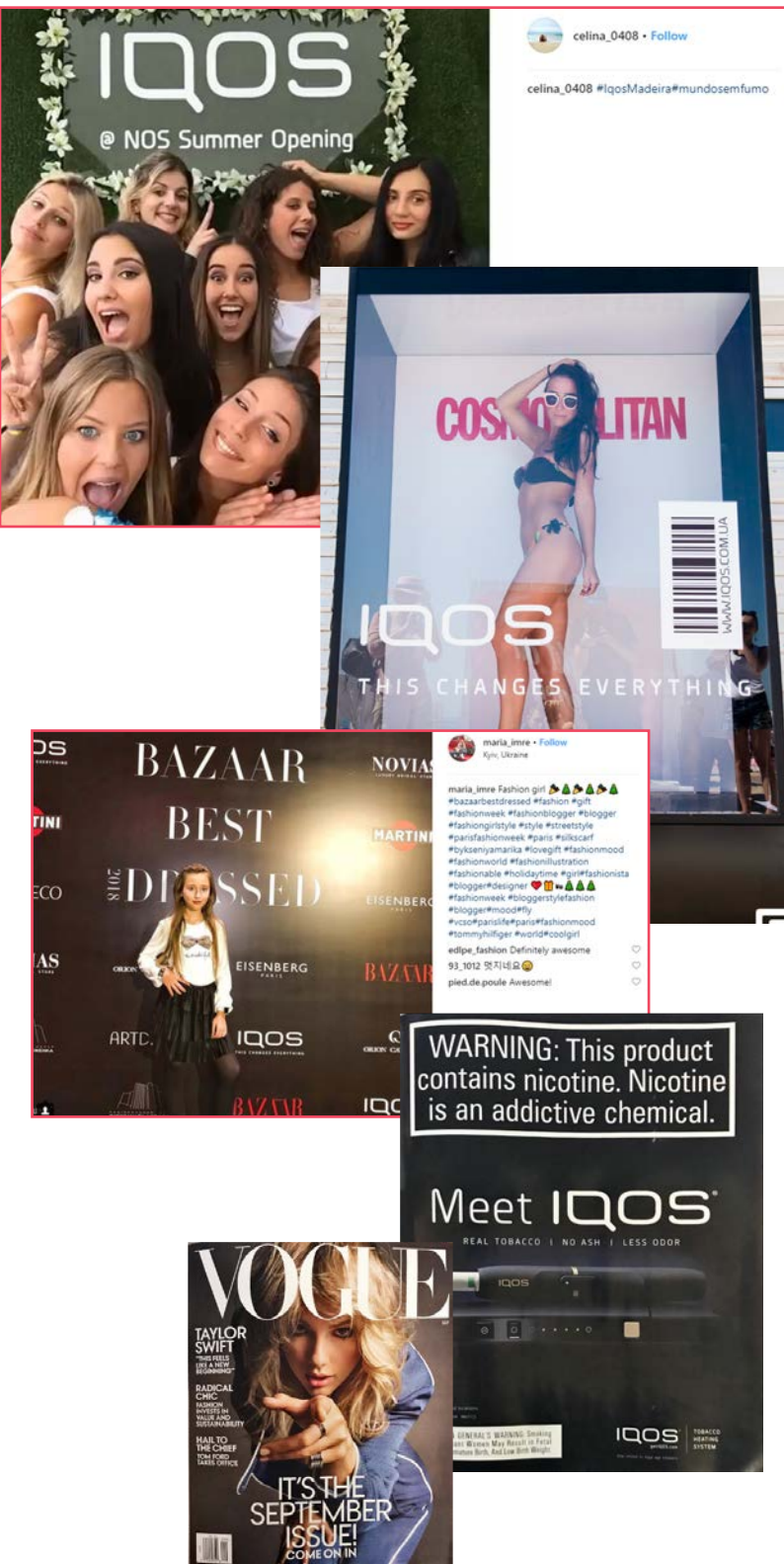
Later, blu relied heavily on social media influencers to market its products on sites popular with kids. Fashionable models and musicians with large followings on platforms such as Instagram and Twitter posted images of themselves holding a blu, making the product look cool and sexy. These pictures were often posted to both the influencer’s own account as well as the blu Instagram account, greatly increasing the number of viewers who would see the post. blu has sponsored music events and parties adjacent to major festivals like South by Southwest and art events, which provide many opportunities for social media posts.

blu also ran a series of promotional events, including a party bus and mural in Atlanta, bar and club promotions and a Super Bowl party to launch its new myblu product. Images highlighted women enjoying these events in Atlanta and beyond, and made blu appear to be a glamorous, lifestyle brand. One of blu’s biggest promotions was the “Pledge World” campaign, in which people entered to win money to allow them to accomplish what they “truly want to do.” Promotional materials include young, attractive men and women taking on adventurous activities, from scuba diving to skydiving and rock climbing.





# NEW PRODUCTS CONTINUED



## IQOS

IQOS is a heated cigarette product from Philip Morris International (PMI) that uses an electronic device to heat compressed “tobacco sticks.” Sold in various countries since 2014, FDA authorized the sale of IQOS in the U.S. in 2019. With Altria handling the U.S. market, IQOS is currently sold in Georgia, North Carolina, South Carolina and Virginia, with plans to expand in 2021.

IQOS is being marketed as a sophisticated, high-tech and aspirational product.<sup>111</sup> While advertising in the U.S. is still quite limited, across the globe PMI uses strategically placed displays, sponsored parties and cultural events, partnerships with fashion and design industries, and social media to market IQOS to women and girls.<sup>112</sup>

PMI has set up IQOS lounges at public festivals and hosted elaborate IQOS-branded social events and parties. These parties feature popular music artists, DJs, and celebrities linked to the art, fashion, or design world.

PMI has sponsored fashion and design events, such as Mercedes-Benz Fashion Days in Ukraine, and has partnered with women’s fashion magazines for projects that include designing IQOS case covers. Images posted on social media platforms have featured paid influencers who model with products, attend glamorous parties, group dinners and engage in other activities that associate IQOS with a stylish lifestyle.<sup>113</sup> Though the posts originate from outside of the U.S., some influencers have enough American followers that one post can potentially reach more than a million Americans.<sup>114</sup>

In the U.S., Altria has opened sleek IQOS stores in high-end shopping malls.<sup>115</sup> Leading up to its U.S. launch in September 2019, Altria placed an ad for IQOS in Vogue magazine that featured Taylor Swift on the cover.

In 2020, FDA granted an order allowing PMI to market IQOS using a specific “reduced exposure” claim, which Altria has already started using in some of its marketing materials. Given the history of women being disproportionately affected by tobacco companies’ deceptive marketing of “light” and “low tar” cigarettes, FDA must carefully monitor Altria’s marketing and IQOS use rates to ensure that similar trends among women do not result from allowing the use of these claims.

1920s

1930s

1940s

1950s

1960s

1970s

1980s

1990s

2000s

2010s

2020s

# LOOKING FORWARD

**To create better health outcomes, it is imperative that policymakers implement solutions to help women and girls quit smoking and prevent young people from ever starting to use tobacco products. These actions will benefit women and girls for decades to come. Our solutions include:**

## **Expanding the availability and promotion of smoking cessation treatments.**

Comprehensive, barrier-free tobacco cessation coverage can give tobacco users the best chance to quit successfully. Specific actions should include:

- ▶ Ensuring access to barrier-free evidence-based tobacco cessation treatments. These services must be widely promoted so health care providers and tobacco users know they are available.
- ▶ Expanding effective media campaigns to help more tobacco users quit. The CDC's national public education campaign, Tips from Former Smokers (Tips), has proven to be highly successful at reducing smoking.

## **Ensuring women receive advice to quit from their healthcare providers.**

40% of women smokers who saw a physician or other health professional in the past year report not receiving advice to quit smoking. This is a concern because healthcare providers play a vital role in helping their patients quit using tobacco. Even brief advice to quit from a health professional makes it more likely that a patient will try and ultimately succeed in quitting.<sup>116</sup> Asking about tobacco use and offering advice to quit should be integrated into maternal and reproductive health care as well as general medicine.

## **Eliminating all flavored tobacco products, including menthol cigarettes, will help prevent girls and young women from using these products.**

- ▶ By masking the harshness and increasing the appeal of tobacco, flavors make it easier for new users—particularly youth—to try tobacco products and ultimately become addicted. Menthol also makes cigarettes more addictive and harder to quit.<sup>117</sup> The FDA recently took a major step forward by announcing that it will initiate rulemaking to prohibit menthol cigarettes and flavored cigars.
- ▶ Female smokers are significantly more likely to use menthol cigarettes than men.<sup>118</sup> Because menthol cigarettes are more addictive and harder to quit, the health damage that smoking inflicts on women is magnified. Eliminating menthol cigarettes will lead more women to quit, improve health and save lives.

## **Implementing proven policy solutions including cigarette tax increases, well-funded tobacco prevention and cessation programs and comprehensive smoke-free workplace laws, which reduce smoking and protect everyone from exposure to secondhand smoke.**

These policy measures are proven to be effective at preventing young people from starting to use tobacco products, helping smokers quit and protecting non-smokers from secondhand smoke.<sup>119</sup>

- ▶ The U.S. Surgeon General reported in 2014 that “raising prices on cigarettes is one of the most effective tobacco control interventions.” A significant cigarette tax reduces smoking and saves lives by making cigarettes too expensive for many kids to buy and giving smokers another incentive to quit. The higher the tax, the more lives saved—especially when a portion of the revenue is dedicated to funding tobacco prevention and cessation programs.
- ▶ Comprehensive tobacco prevention and cessation programs prevent kids from starting to smoke, encourage and help smokers to quit, address tobacco-related disparities, and combat tobacco industry marketing. National studies consistently show powerful, positive effects of tobacco prevention and cessation programs.
- ▶ Comprehensive smoke-free workplace laws protect everyone's right to breathe clean air. In 2014, the U.S. Surgeon General called for “extending comprehensive smoke-free indoor protections to 100% of the U.S. population,” and reported that “smoke-free legislation at the state and local levels is a key component of a comprehensive tobacco control strategy.”

For decades, the tobacco industry has targeted women and girls with aggressive marketing campaigns while obfuscating the truth of tobacco's impact on their health. By exploiting women's aspirations and desires and preying on image concerns and perceived insecurities, tobacco companies have addicted millions of women and girls to products that are killing them. The industry's deliberate targeting has had a destructive impact on women's health. Now, strong action is needed to protect the health – and lives – of women and girls.



# END NOTES

## BY THE NUMBERS

**Tobacco and e-cigarette use by girls:** 2020 National Youth Tobacco Survey (NYTS) & U.S. Bureau of Census 2019 population data

**Tobacco use by women:** 2019 National Health Interview Survey (NHIS) & U.S. Bureau of Census 2019 population data; Wang, T, et al., "State-Specific Prevalence of Tobacco Product Use Among US Women, Tobacco Use Supplement to the Current Population Survey, 2018–2019," *Preventing Chronic Disease*, 18(36), April 2021.

**Smoking during pregnancy:** Births: Final Data for 2019, *National Vital Statistics Reports*, 70(2), National Center for Health Statistics, March 23, 2021.

**Menthol use among women:** Villanti, A., et al., "Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004–2014," *Tobacco Control*, published online October 20, 2016.

**Tobacco-related deaths:** HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014.

**Life expectancy:** HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014.

**Secondhand smoke Exposure:** Brody, D, et al., "Secondhand Smoke Exposure Among Nonsmoking Adults: United States, 2015–2018," *National Center for Health Statistics* (No. 396), February 2021.

**Health Care Costs:** Xu, X et al., "Annual Healthcare Spending Attributable to Cigarette Smoking: An Update," *Am J Prev Med*, 2014, based on female proportion of annual smoking deaths. In 2010 dollars.

## END NOTES

- 1 SAMHSA. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health (NSDUH).
- 2 Wang, TW, et al., "E-cigarette Use Among Middle and High School Students – United States, 2020," *MMWR*, Volume 69, September 9, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6937e1-H.pdf>.
- 3 Wang, TW, et al., "E-cigarette Use Among Middle and High School Students – United States, 2020," *MMWR*, Volume 69, September 9, 2020.
- 4 Barrington-Trimis, JL, et al., "E-Cigarettes and Future Cigarette Use," *Pediatrics*, 138(1), published online July 2016; Berry, KM, et al., "Association of Electronic Cigarette Use with Subsequent Initiation of Tobacco Cigarettes in US Youths," *JAMA Network Open*, 2(2), published online February 1, 2019; National Academies of Sciences, Engineering, and Medicine. 2018. Public health consequences of e-cigarettes. Washington, DC: The National Academies Press. <http://nationalacademies.org/hmd/Reports/2018/public-health-consequences-of-e-cigarettes.aspx>
- 5 Jackler, RK, Ramamurthi, D, "Nicotine arms race: JUUL and the high-nicotine product market" *Tobacco Control*, published online February 6, 2019.
- 6 HHS, *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.
- 7 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/>.
- 8 HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014
- 9 HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014.
- 10 Levy D., et al. School absenteeism among children living with smokers. *Pediatrics*. 2011 Oct;128(4):650-6.
- 11 HHS, *Women and Smoking: A Report of the Surgeon General*. Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2001/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2001/index.htm).
- 12 HHS, *A Report of the Surgeon General: Highlights Overview of Findings Regarding Reproductive Health*, 2010. [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2010/highlight\\_sheets/pdfs/overview\\_reproductive.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/2010/highlight_sheets/pdfs/overview_reproductive.pdf)
- 13 HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014; HHS, *Women and Smoking: A Report of the Surgeon General*, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2001/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2001/index.htm).
- 14 CDC, "Women and Smoking," 50th Anniversary, Surgeon General's Report on Smoking & Health, [https://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/pdfs/fs\\_women\\_smoking\\_508.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/pdfs/fs_women_smoking_508.pdf)
- 15 HHS, *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*, 2014. CDC, "Smoking and Reproduction," 50th Anniversary, Surgeon General's Report on Smoking & Health, [https://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/pdfs/fs\\_smoking\\_reproduction\\_508.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/pdfs/fs_smoking_reproduction_508.pdf)
- 16 HHS, *A Report of the Surgeon General: Highlights Overview of Findings Regarding Reproductive Health*, 2010 [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2010/highlight\\_sheets/pdfs/overview\\_reproductive.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/2010/highlight_sheets/pdfs/overview_reproductive.pdf).

## END NOTES CONTINUED

- 17 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; CDC, "Smoking and Reproduction," 50th Anniversary, Surgeon General's Report on Smoking & Health.
- 18 HHS, A Report of the Surgeon General, How Tobacco Smoke Causes Disease: What It Means To You, 2010 [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2010/consumer\\_booklet/index.htm](https://www.cdc.gov/tobacco/data_statistics/sgr/2010/consumer_booklet/index.htm)
- 19 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; CDC, "Smoking and Reproduction," 50th Anniversary, Surgeon General's Report on Smoking & Health.
- 20 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; HHS, The Health Consequences of Smoking: A Report of the Surgeon General, 2004.
- 21 **On abnormal blood pressure in infants and children**, see, e.g., Morley, R, et al., "Maternal Smoking and Blood Pressure in 7.5 to 8 Year Old Offspring," *Archives of Disease in Childhood* 72(2):120-24, February 1995; Blake, KV, et al., "Maternal Cigarette Smoking During Pregnancy, Low Birth Weight and Subsequent Blood Pressure in Early Childhood," *Early Human Development* 57:137-147, 2000. **On childhood leukemia**, see, e.g., Stjernfeldt, M, et al., "Maternal Smoking and Irradiation During Pregnancy as Risk Factors for Child Leukemia," *Cancer Detection and Prevention* 16(2):129-35, 1992. **On congenital abnormalities**, see, e.g., Kallen, K, "Maternal Smoking During Pregnancy and Limb Reduction Malformations in Sweden," *AJPH* 87(1):29-32, January 1997; Czeizel, AE, et al., "Smoking During Pregnancy and Congenital Limb Deficiency," *BMJ* 308(6942):1473-76, 1994; Drews, CD, et al., "The Relationship Between Idiopathic Mental Retardation and Maternal Smoking During Pregnancy," *Pediatrics* 97(4):547-53, April 1997. **On colic**, see Reijnveld, SA, et al., "Infantile Colic: Maternal Smoking As Potential Risk Factor," *Archives of Disease in Childhood* 83:302-303, October 2000. **On wheezing and respiratory problems**, see, e.g., Hu, FB, et al., "Prevalence of Asthma and Wheezing in Public Schoolchildren: Association with Maternal Smoking During Pregnancy," *Annals of Allergy, Asthma, and Immunology* 79(1):80-84, July 1997; Tager, IB, et al., "Maternal Smoking During Pregnancy: Effects on Lung Function During the First 18 Months of Life," *American Journal of Respiratory and Critical Care Medicine* 52(3):977-83, September 1995; Lux, AL, et al., "Wheeze Associated with Prenatal Tobacco Smoke Exposure: A Prospective, Longitudinal Study," *Archives of Disease in Childhood* 83:307-12, October 2000. On eye problems, see, e.g., Hakim, RB & Tielsch, JM, "Maternal Cigarette Smoking During Pregnancy: A Risk Factor for Childhood Strabismus," *Archives of Ophthalmology* 110(10):1459-62, October 1992. On impaired intellectual development, see, e.g., Frydman, M, "The Smoking Addiction of Pregnant Women and the Consequences on the Offspring's Intellectual Development," *Journal of Environmental Pathology, Toxicology and Oncology* 15(2-4):169-72, 1996; Olds, DL, et al., "Intellectual Impairment in Children of Women Who Smoke During Pregnancy," *Pediatrics* 93(2):221-27, 1994 [correction published in 93(6, Pt 1):973, June 1994]. On developmental and behavioral problems see, e.g., Milberger, S, et al., "Further Evidence of an Association Between Maternal Smoking During Pregnancy and Attention Deficit Hyperactivity Disorder: Findings from a High-Risk Sample of Siblings," *Journal of Clinical Child Psychology* 27(3):352-58, October 1998; Orlebeke, JF, et al., "Child Behavior Problems Increased By Maternal Smoking During Pregnancy," *Archives of Environmental Health* 54(1):15-19, 1999; Fergusson, DM & Horwood, LJ, "Prospective Childhood Predictors of Deviant Peer Affiliations in Adolescence," *Journal of Child Psychology and Psychiatry* 40(4):581-92, May 1999; Orlebeke, JF, et al., "Increase in Child Behavior Problems Resulting From Maternal Smoking During Pregnancy," *Archives of Environmental Health* 52(4):317-21, 1997.
- 22 HHS, The Health Consequences of Smoking: What It Means to You, 2004 [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2010/consumer\\_booklet/pdfs/consumer.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/2010/consumer_booklet/pdfs/consumer.pdf)
- 23 CDC, "Births: Final Data for 2019," *National Vital Statistics Reports* Volume 70, Number 2, March 23, 2021, [https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf?ACSTrackingID=USCDC\\_371-DM52902&ACSTrackingLabel=NVSr%2070%2C%20No.%202&deliveryName=USCDC\\_371-DM52902](https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf?ACSTrackingID=USCDC_371-DM52902&ACSTrackingLabel=NVSr%2070%2C%20No.%202&deliveryName=USCDC_371-DM52902).
- 24 CDC, "Cigarette Smoking During Pregnancy: United States, 2016," *NCHS Data Brief* Np. 305, February 2018, <https://www.cdc.gov/nchs/data/databriefs/db305.pdf>.
- 25 HHS, The Health Consequences of Smoking: A Report of the Surgeon General, 2004; See also, HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 26 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 27 Espey DK, Jim MA, Cobb N, et al. Leading Causes of Death and All-Cause Mortality in American Indians and Alaska Nativesexternal icon. *American Journal of Public Health*, 2014;104(Suppl 3):S303–S311; Mowery PD, Dube SR, Thorne SL, et al. Disparities in Smoking-Related Mortality Among American Indians/Alaska Nativesexternal icon. *American Journal of Preventive Medicine*, 2015. See also: <https://www.cdc.gov/tobacco/disparities/american-indians/index.htm#:~:text=More%20American%20Indian%2FAlaska%20Native,%25%20of%20Asians%2FPacific%20Islanders>
- 28 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 29 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 30 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 31 Jimenez, Monik, et al., "Racial Variation in Stroke Risk Among Women by Stroke Risk Factors," *Stroke*, March 14, 2019.
- 32 HHS, Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2001/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2001/index.htm).
- 33 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 34 Brody, D, et al., "Secondhand Smoke Exposure Among Nonsmoking Adults: United States, 2015–2018," *National Center for Health Statistics* (No. 396), February 2021, <https://www.cdc.gov/nchs/data/databriefs/db396-H.pdf>.
- 35 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 36 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; See also, HHS, Let's Make the Next Generation Tobacco-Free: Your Guide to the 50th Anniversary Surgeon General's Report on Smoking and Health, 2014, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/consumer-guide.pdf>.
- 37 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 38 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.



## END NOTES CONTINUED

- 39 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 40 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 41 CDC, "People with Certain Medical Conditions," accessed October 21, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>.
- 42 HHS, The Health Consequences of Smoking: A Report of the Surgeon General, 2004. See also, HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 43 CDC, "Vital Signs: Disparities in Tobacco-Related Cancer Incidence and Mortality—United States, 2004-2013," *Morbidity & Mortality Weekly Report*, 65(44): 1212-1218, <http://www.cdc.gov/mmwr/volumes/65/wr/mm6544a3.htm>.
- 44 US Mortality Public Use Data Tapes 1960-2003, US Mortality Volumes 1930-1959, National Center for Health Statistics, Centers for Disease Control and Prevention, 2006. See also, American Cancer Society, *Cancer Facts and Figures*, 2014, <http://www.cancer.org/acs/groups/content/@research/documents/webcontent/acspc-042151.pdf>.
- 45 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; HHS, *Women and Smoking: A Report of the Surgeon General*, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2001/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2001/index.htm).
- 46 American Cancer Society, *Cancer Facts & Figures 2018*, <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf>.
- 47 American Cancer Society, "Cancer Facts & Figures for African Americans, 2019-2021," 2019, <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-african-americans/cancer-facts-and-figures-for-african-americans-2019-2021.pdf>.
- 48 HHS, The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. 2014. Thun, MJ, et al., "50-Year Trends in Smoking-Related Mortality in the United States," *New England Journal of Medicine* 368(4):351-64, January 24, 2013; Thun MJ, Heath, Jr., CW, "Changes in mortality from smoking in two American Cancer Society prospective studies since 1959," *Preventive Medicine* 26(4):422-6, 1997.
- 49 CDC, National Diabetes Statistics report, 2020. <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>
- 50 CDC National Vital Statistics Report, Vol. 68, No. 9. Table 10, 2019 [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_09-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf); U.S. Department of Health and Human Services (HHS), The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014; Heron, Melanie, *Deaths: Leading Causes for 2017*, National Vital Statistics Reports, 2019; vol 68: no 6. [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_06-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf)
- 51 CDC, Smoking and Diabetes, <https://www.cdc.gov/tobacco/campaign/tips/diseases/diabetes.html>
- 52 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 53 Matthews, K. A., Xu, W., Gaglioti, A. H., Holt, J. B., Croft, J. B., Mack, D., & McGuire, L. C. (2018). Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged ≥ 65 years. *Alzheimer's & Dementia*; Centers for Disease Control and Prevention (CDC). Alzheimer's Disease. 2021. <https://www.cdc.gov/dotw/alzheimers/index>; CDC, *Alzheimer's Disease and Related Dementia*, <https://www.cdc.gov/aging/aginginfo/alzheimers.htm#Who> Accessed 14 April 2021.
- 54 Park B, Park J, Jun JK, Choi KS, Suh M (2013) Gender Differences in the Association of Smoking and Drinking with the Development of Cognitive Impairment. *PLoS ONE* 8(10).
- 55 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 56 Suñer IJ, Cousins SW. The biology of smoking and age-related macular degeneration. *Rev Ophthalmol* 2006 13:87-90. <https://www.reviewofophthalmology.com/article/the-biology-of-smoking-and-amd>. See also: Khan, J C et al. "Smoking and age related macular degeneration: the number of pack years of cigarette smoking is a major determinant of risk for both geographic atrophy and choroidal neovascularisation." *The British Journal of Ophthalmology* vol. 90,1 (2006): 75-80.
- 57 The National Institutes of Health. Smoking and Bone Health. Bethesda, MD, NIH Osteoporosis and Related Bone Diseases ~ National Resource Center, 2018. <https://www.bones.nih.gov/sites/bones/files/pdfs/smokingbonehealth-508-12-18.pdf>
- 58 The National Institutes of Health. Smoking and Bone Health. Bethesda, MD, NIH Osteoporosis and Related Bone Diseases ~ National Resource Center, 2018. <https://www.bones.nih.gov/sites/bones/files/pdfs/smokingbonehealth-508-12-18.pdf>
- 59 Al-Bashaireh, A. M., Haddad, L. G., Weaver, M., Chengguo, X., Kelly, D. L., & Yoon, S. (2018). The Effect of Tobacco Smoking on Bone Mass: An Overview of Pathophysiologic Mechanisms. *Journal of osteoporosis*, 2018, 1206235. <https://doi.org/10.1155/2018/1206235>
- 60 Al-Bashaireh, A. M., Haddad, L. G., Weaver, M., Chengguo, X., Kelly, D. L., & Yoon, S. (2018). The Effect of Tobacco Smoking on Bone Mass: An Overview of Pathophysiologic Mechanisms. *Journal of osteoporosis*, 2018, 1206235. <https://doi.org/10.1155/2018/1206235>
- 61 Smith RL, Flaws JA, Gallicchio L. Does quitting smoking decrease the risk of midlife hot flashes? A longitudinal analysis. *Maturitas*. 2015;82(1):123-127.
- 62 Kumar, P., et al. Living under a cloud: Electronic cigarettes and the dental patient. *The Journal of the American Dental Association*, 151(3), 155-158, 2020. <https://jada.ada.org/action/showPdf?pii=S0002-8177%2820%2930004-0>
- 63 Yang, I., et al. The oral health impact of electronic cigarette use: a systematic review. *Critical Reviews in Toxicology*, 50(2), 97-127. 2020. <https://www.tandfonline.com/doi/abs/10.1080/10408444.2020.1713726>
- 64 Pushalkar, S., et al. Electronic Cigarette Aerosol Modulates the Oral Microbiome and Increases Risk of Infection. *Iscience*, 100884.2020; Ganesan, S. M, Adverse effects of electronic cigarettes on the disease-naïve oral microbiome. *Science Advances*, 6(22), eaaz0108. <https://advances.sciencemag.org/content/6/22/eaaz0108>

## END NOTES CONTINUED

- 65 CDC, "Quitting Smoking Among Adults—United States, 2000-2015," *MMWR*, 65(52): 1457-1464, January 6, 2017, <https://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6552a1.pdf>
- 66 HHS, Smoking Cessation. A Report of the Surgeon General, 2020.
- 67 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 68 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 69 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 70 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 71 HHS, The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014.
- 72 Smokefree.gov. "How Quitting Helps Women's Health." Accessed 6 April 2021. <https://women.smokefree.gov/quit-smoking-women/what-women-should-know/how-quitting-helps-women>
- 73 The Health Consequences of Smoking: A Report of the Surgeon General, 2004
- 74 The Health Consequences of Smoking: A Report of the Surgeon General, 2004.
- 75 Smokefree.gov. "How Quitting Helps Women's Health." Accessed 6 April 2021. <https://women.smokefree.gov/quit-smoking-women/what-women-should-know/how-quitting-helps-women>
- 76 Tobacco and nicotine cessation during pregnancy. ACOG Committee Opinion No. 807. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2020;135:e221–9.
- 77 American Society of Clinical Oncology. Stopping Tobacco Use After a Cancer Diagnosis. Alexandria, VA: American Society of Clinical Oncology, 2019.
- 78 American Society of Clinical Oncology. Stopping Tobacco Use After a Cancer Diagnosis. Alexandria, VA: American Society of Clinical Oncology, 2019.
- 79 Bendrix, A, "Vintage ads show the hidden legacy of the Marlboro Man. The brand first became popular as a women's cigarette," *Business Insider*, February 20, 2020, <https://www.businessinsider.com/marlboro-man-cigarette-brand-history-vintage-ads-2020-2>.
- 80 U.S. Department of Health and Human Services (HHS), Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/index.htm).
- 81 Bendrix, A, "Vintage ads show the hidden legacy of the Marlboro Man. The brand first became popular as a women's cigarette," *Business Insider*, February 20, 2020, <https://www.businessinsider.com/marlboro-man-cigarette-brand-history-vintage-ads-2020-2>.
- 82 Substance Abuse and Mental Health Services Administration (SAMHSA), public online data analysis system (PDAS), National Survey on Drug Use and Health, Various Years, accessed April 22, 2021, <https://pdas.samhsa.gov/#/>.
- 83 U.S. Department of Health and Human Services (HHS), Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/index.htm).
- 84 HHS, Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/index.htm).
- 85 U.S. Department of Health and Human Services (HHS), Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/index.htm).
- 86 Pierce JP, Lee L, & Gilpin EA, "Smoking initiation by adolescent girls, 1944 through 1988: An association with targeted advertising," *Journal of the American Medical Association* 271(8), 1994.
- 87 Pierce, JP, Lee, L, & Gilpin EA, "Smoking initiation by adolescent girls, 1944 through 1988: An association with targeted advertising," *Journal of the American Medical Association* 271:8, 1994.
- 88 Philip Morris, Virginia Slims introduces the low tar cigarette made just for women, 1978 (PM 1005064182).
- 89 National Institutes of Health, Risks Associated with Smoking Cigarettes with Low Machine-Yields of Tar and Nicotine; Report of the NCI Expert Committee, National Cancer Institute, Smoking and Tobacco Control Monograph 13, October 2001.
- 90 National Institutes of Health, Risks Associated with Smoking Cigarettes with Low Machine-Yields of Tar and Nicotine; Report of the NCI Expert Committee, National Cancer Institute, Smoking and Tobacco Control Monograph 13, October 2001.
- 91 Stellman, SD, et al., "Risk of Squamous Cell Carcinoma and Adenocarcinoma of the Lung in Relation to Lifetime Filter Cigarette Smoking," *Cancer* 80(3):382-88, August 1997. See also, 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/>.
- 92 Stellman, SD, et al., "Risk of Squamous Cell Carcinoma and Adenocarcinoma of the Lung in Relation to Lifetime Filter Cigarette Smoking," *Cancer* 80(3):382-88, August 1997. See also, 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/>.
- 93 2003 Tobacco Use Special Supplement to the Current Population Survey (TUSCC-CPS). See also, Pillitteri, JL, et al., "Smokers beliefs about light and ultralight cigarettes," *Tobacco Control* 10(Suppl):i17-i23, 2001.



## END NOTES CONTINUED

- 94 Giovinò, G, et al., "Attitudes, Knowledge, and Beliefs About Low-yield Cigarettes Among Adolescents and Adults," in The FTC Cigarette Test Method for Determining Tar, Nicotine, and Carbon Monoxide Yields of U.S. Cigarettes; Report of the NCI Expert Committee, Smoking and Tobacco Control Monograph 7, National Institutes of Health, National Cancer Institute.
- 95 Tindle, HA, et al., "Cessation Among Smokers of 'Light Cigarettes': Results from the 2000 National Health Interview Survey," *American Journal of Public Health* 96(8): 1498-504, August 2006.
- 96 U.S. V. Philip Morris USA, Inc., et al., No. 99-CV-02496GK (U.S. Dist. Ct., D.C.), Final Opinion, August 17, 2006, <http://www.tobaccofreekids.org/reports/doj/FinalOpinion.pdf>.
- 97 Family Smoking Prevention and Tobacco Control Act, [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=fh1256nr.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=fh1256nr.txt.pdf).
- 98 Pollack, J., "Virginia Slims Translates Theme For Many Cultures: Cigarette Brand's \$40 Mil Effort May Be Historic; Uses Multipage Magazine Inserts," *Ad Age*, September 13, 1999.
- 99 U.S. Department of Health and Human Services (HHS), Women and Smoking: A Report of the Surgeon General, Washington, DC: HHS, Public Health Service, Office of the Surgeon General, 2001, [http://www.cdc.gov/tobacco/data\\_statistics/sgr/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/index.htm).
- 100 Fairclough, G, "Philip Morris Removes Slogan From Ads In Second Attempt Responding To Critics," *Wall Street Journal*, June 12, 2000.
- 101 "From Joe Camel to Barbie Camel," *The Oregonian*, May 13, 2007.
- 102 CDC, "Hispanics/Latinos and Tobacco Use," accessed April 23, 2021. <https://www.cdc.gov/tobacco/disparities/hispanics-latinos/index.htm>
- 103 Landrine, H, et al., "Cigarette advertising in Black, Latino and White magazines, 1998-2002: An exploratory investigation," *Ethnic Disparities* 15(1):63-7, 2005.
- 104 Iglesias-Rios & Parascandola, "A Historical Review of R.J. Reynolds' Strategies for Marketing Tobacco to Hispanics in the United States," *Am J Pub Health*, 103(5): e15-27, 2013.
- 105 Substance Abuse and Mental Health Services Administration (SAMHSA), public online data analysis system (PDAS), National Survey on Drug Use and Health, Various Years, accessed April 22, 2021, <https://pdas.samhsa.gov/#/>.
- 106 HHS, E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: HHS, U.S. Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.
- 107 CDC, "Tobacco Product Use and Associated Factors Among Middle and High School Students—United States, 2019," *MMWR* 68(12): December 6, 2019, <https://www.cdc.gov/mmwr/volumes/68/ss/pdfs/ss6812a1-H.pdf>.
- 108 "Gateway to Addiction? A Survey of Popular Electronic Cigarette Manufacturers and Marketing to Youth," April 14, 2014, <http://democrats.energycommerce.house.gov/sites/default/files/documents/Report-E-Cigarettes-Youth-Marketing-Gateway-To-Addiction-2014-4-14.pdf>. See also, Noel, JK, Rees, VW, & Connolly, GN, "Electronic cigarettes: a new 'tobacco' industry?" *Tobacco Control* 20:81, 2011.
- 109 Huang, J, et al., "Vaping versus Juuling: how the extraordinary growth and marketing of Juul transformed the US retail e-cigarette market," *Tobacco Control*, published online May 31, 2018.
- 110 PR Newswire, "Jenny McCarthy Pairs Up With blu eCigs In New Television And Web Advertising Campaign," August 1, 2013, <https://www.prnewswire.com/news-releases/jenny-mccarthy-pairs-up-with-blu-ecigs-in-new-television-and-web-advertising-campaign-217913901.html>.
- 111 Hair, EC, et al., "Examining perceptions about IQOS heated tobacco product: consumer studies in Japan and Switzerland," *Tobacco Control* doi: 10.1136/tobaccocontrol-2018-054322, published online first, May 15, 2018.
- 112 Examples of IQOS marketing in various countries described below are available at: [https://www.tobaccofreekids.org/assets/content/press\\_office/2019/IQOS-mktg.pdf](https://www.tobaccofreekids.org/assets/content/press_office/2019/IQOS-mktg.pdf).
- 113 Additional examples of IQOS marketing on social media are available at: <https://www.tobaccofreekids.org/media/2019/iqos-marketing>.
- 114 Campaign for Tobacco-Free Kids et al., Petition to the U.S. Federal Trade Commission, Request for Investigative and Enforcement Action to Stop Deceptive Advertising Online, August 24, 2018, [https://www.tobaccofreekids.org/assets/content/press\\_office/2018/2018\\_08\\_ftc\\_petition.pdf](https://www.tobaccofreekids.org/assets/content/press_office/2018/2018_08_ftc_petition.pdf).
- 115 Churchill, V, et al., "IQOS debut in the USA: Philip Morris International's heated tobacco device introduced in Atlanta, Georgia," *Tobacco Control*, Published Online First, February 5, 2020.
- 116 HHS, Smoking Cessation, A Report of the Surgeon General, Office on Smoking and Health, 2020, [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2020-smoking-cessation/index.html#consumer-guide](https://www.cdc.gov/tobacco/data_statistics/sgr/2020-smoking-cessation/index.html#consumer-guide)
- 117 FDA. Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes (2013) <http://www.fda.gov/downloads/ScienceResearch/SpecialTopics/PeerReviewofScientificInformationandAssessments/UCM361598.pdf>; TPSAC, Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations, July 21, 2011 <http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/TobaccoProductsScientificAdvisoryCommittee/UCM269697.pdf>
- 118 Villanti, A., et al., "Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004–2014," *Tobacco Control*, published online October 20, 2016.
- 119 HHS, The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General, 2014; U.S. Centers for Disease Control and Prevention (CDC), Best Practices for Comprehensive Tobacco Control Programs, Atlanta, GA: U.S. Department of Health and Human Services (HHS), January 30, 2014.