

## Fast Facts

To provide you with the best science and to reduce review time, please find the following science-approved facts for use in your campaigns and materials. After each fact you will also find fast facts based on the science that can be cut and pasted word-for-word without need for additional science review. Please note that any change in wording will result in the need to run your documents through science review before release.

### Flavored E-cigarettes Are Fueling A Rapid Rise In E-cigarette Use Among Kids

#### FACT 1

Flavored e-cigarettes are driving the youth e-cigarette epidemic. 97% of youth e-cigarette users report using a flavored product in the past month, and 70% cite flavors as a key reason for their use.

#### Fast Facts:

- ▶ Nearly all middle and high school students who use e-cigarettes use flavored products.
- ▶ More than 95% of middle and high school students who use e-cigarettes report using flavored products.
- ▶ Among middle and high school students who use e-cigarettes, 97% report using flavored products.
- ▶ Among middle and high school students who use e-cigarettes, 70% reported that flavored products were a key reason for their use.
- ▶ Flavored products are being used by 97% of middle and high schoolers using e-cigarettes.

#### Source:

<https://www.fda.gov/news-events/press-announcements/trump-administration-combating-epidemic-youth-e-cigarette-use-plan-clear-market-unauthorized-non>

#### FACT 2

Most youth e-cigarette users use fruit and menthol or mint flavors. 66% of high school e-cigarette users reported using a fruit-flavored product, while 57% of high school e-cigarette users reported using a mint- or menthol-flavored product.

#### Fast Facts:

- ▶ Most high school students who use e-cigarettes use fruit-, mint-, or menthol-flavored products.
- ▶ More than 65% of high school students who use e-cigarettes use fruit-flavored products.
- ▶ Nearly 60% of high school students who use e-cigarettes use mint- or menthol-flavored products.

#### Source:

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

### FACT 3

A 2019 poll conducted by the Campaign for Tobacco-Free Kids found that nearly three-quarters (73%) of likely voters supported taking all flavored e-cigarettes off the market, including 77% of Democrats, 74% of Republicans, and 70% of Independents.

#### **Fast Facts:**

- ▶ A strong majority of likely voters support taking all flavored e-cigarettes off the market.
- ▶ Nearly three out of four likely voters support taking all flavored e-cigarettes off the market.
- ▶ More than 70% of likely voters support taking all flavored e-cigarettes off the market.
- ▶ More than 75% of Democrats support taking all flavored e-cigarettes off the market.
- ▶ More than 70% of Republicans support taking all flavored e-cigarettes off the market.
- ▶ A 70% majority of Independent voters support taking all flavored e-cigarettes off the market.
- ▶ Support for taking all flavored e-cigarettes off the market comes from over 70% of likely voters.

#### **Source:**

Shoen D, Cooperman C. Flavored E-Cigarette Ban Benchmark Study Memo for Campaign for Tobacco Free Kids. United States, 2019.

## Flavored Tobacco Products

### FACT 1

In 2019, 69.6% (4.3 million, nearly 7 in 10) of middle and high school students who currently used tobacco products reported using at least one flavored tobacco product. E-cigarettes were the most commonly used flavored tobacco product (68.8% of current e-cigarette users; 3.7 million). The proportion of other current tobacco product users who reported flavored product use was 48.0% for smokeless tobacco, 46.7% for cigarettes (menthol only), 41.9% for cigars, 31.4% for pipe tobacco, and 31.2% for hookahs.

#### **Fast Facts:**

- ▶ Across all types of tobacco products, flavored products are popular with middle and high school students.
- ▶ In 2019, nearly 70% of middle and high school students who used tobacco products reported using at least one flavored tobacco product.
- ▶ In 2019, 4.3 million middle and high school students used at least one flavored tobacco product.
- ▶ Nearly 7 out of 10 middle and high school students who used tobacco products reported using at least one flavored tobacco product.
- ▶ Of middle and high school students who smoke cigarettes, more than 68% of middle and high school students who use e-cigarettes use flavored products.

### **Fast Facts (continued):**

- ▶ In 2019, 3.7 million middle and high school students used flavored e-cigarettes.
- ▶ In 2019, e-cigarettes were the most common flavored tobacco product used by middle and high school students.
- ▶ Of middle and high school students who use smokeless tobacco, 48% use flavored products.
- ▶ Of middle and high school students who smoke cigarettes, 47% smoke menthol cigarettes.
- ▶ Of middle and high school students who smoke pipe tobacco, more than 30% smoke flavored tobacco.
- ▶ Of middle and high school students who smoke hookah, more than 30% smoke flavored tobacco.

#### **Source:**

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. *MMWR Surveill Summ* 2019;68(No. SS-12):1–22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1external icon>

### **FACT 2**

Among current tobacco product users, flavored tobacco product use was 72.8% among high school students and 59.6% among middle school students. Flavored tobacco product use was highest among non-Hispanic whites (76.8%) compared with students of other non-Hispanic races (68.1%), Hispanics (63.1%), and non-Hispanic blacks (48.0%). The proportion of current tobacco users who used flavored products was 68.6% among females and 70.7% among males.

### **Fast Facts:**

- ▶ More than 72% of high school students who use tobacco products use flavored tobacco.
- ▶ More than 59% of middle school students who use tobacco products use flavored tobacco.
- ▶ More than 68% of middle and high school girls who use tobacco products use flavored tobacco.
- ▶ More than 70% of middle and high school boys who use tobacco products use flavored tobacco.
- ▶ More than 76% of white middle and high school students who use tobacco products use flavored tobacco.
- ▶ More than 63% of Hispanic middle and high school students who use tobacco products use flavored tobacco.
- ▶ More than 48% of Black middle and high school students who use tobacco products use flavored tobacco.
- ▶ Nearly 3 in 4 high school students who use tobacco products use flavored products.

#### **Source:**

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. *MMWR Surveill Summ* 2019;68(No. SS-12):1–22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1external icon>

### FACT 3

Historically, cigar manufacturers designed flavored cigars to serve as “starter” smokes for youth and young adults because the flavorings helped mask the harshness, making the products easier to smoke. Recently, there has been an explosion of cheap, flavored cigars. Sales of all cigars (i.e., large cigars, cigarillos and small cigars) more than doubled between 2000 and 2017, from 6.1 billion cigars to 13.3 billion cigars, and sales have been generally increasing at a time when cigarette sales have been declining.

#### Fast Facts:

- ▶ Cigar manufacturers designed flavored cigars as a starter product for youth and young adult users because the flavors made the products easier to smoke.
- ▶ The sale of cheap, flavored cigars has recently increased drastically.
- ▶ Sales of all cigars more than doubled between 2000 and 2017.
- ▶ Cigar sales rose from more than 6 billion in 2000 to more than 13 billion in 2017.
- ▶ From 2000 to 2017, cigar sales rose by 7.2 billion.
- ▶ Sales of cigars increased between 2000 and 2017 despite a decline in cigarette sales.

#### Source:

Kostygina, G, Glantz, S, & Ling, PM, “Tobacco industry use of flavours to recruit new users of little cigars and cigarillos,” *Tobacco Control* 25(1):66-74, January 2016

U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB), Tobacco Statistics. December 2000 & December 2017, <https://www.ttb.gov/tobacco/tobacco-stats.shtml>.

### FACT 4

A government study found that 81% of kids who have ever used tobacco products started with a flavored product, including 81% who have ever tried e-cigarettes and 65% who have ever tried cigars. Youth also cite flavors as a major reason for their current use of non-cigarette tobacco products, with 81.5% of youth e-cigarette users and 73.8% of youth cigar users saying they used the product “because they come in flavors I like.”

#### Fast Facts:

- ▶ More than 80% of youth who have ever used tobacco products started with a flavored tobacco product.
- ▶ The majority of youth who use tobacco products start with flavored products.
- ▶ More than 8 out of 10 youth who have ever used tobacco products started with a flavored product.
- ▶ Among youth who have ever used e-cigarettes, 81% used a flavored product first.
- ▶ Among youth who have ever tried cigars, 65% used a flavored product first.
- ▶ More than 80% of youth e-cigarette users use e-cigarettes because they come in flavors they like.
- ▶ Nearly 3 in 4 youth cigar smokers smoke cigars because they come in flavors they like.
- ▶ Flavored products are a major reason for youth use of non-cigarette tobacco like e-cigarettes and cigars.
- ▶ Flavored products were the first tobacco product used by 4 in 5 youth who never used e-cigarettes before.

#### Source:

Ambrose, BK, et al., “Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014,” *Journal of the American Medical Association*, published online October 26, 2015.

## FACT 5

It was observed that 81% of youth and 86% of young adults who had ever used tobacco reported that their first product was flavored, versus 54% of adults aged 25 or older. Further, among youth who ever used tobacco, those who said that their first tobacco product was flavored had a 13% higher prevalence of current tobacco use a year later. And among adults who ever used tobacco, those who said that their first tobacco product was flavored had a 32% higher prevalence of current tobacco use a year later.

### **Fast Facts:**

- ▶ Using flavored tobacco products results in a higher likelihood that users will continue to use tobacco.
- ▶ Among youth who ever used tobacco, those who began using with flavored products had 13% higher prevalence to still be using tobacco a year later.
- ▶ Among adults who ever used tobacco, those who began using with flavored products had 32% higher prevalence to still be using tobacco a year later.
- ▶ Among young adults who have ever used a tobacco product, 86% used a flavored product first.
- ▶ Among adults 25 and older who have ever used a tobacco product, 54% used a flavored product first.
- ▶ More than half of adults who have used a tobacco product started with a flavored product.
- ▶ Use of flavored tobacco products by youth was associated with 13% higher prevalence of current tobacco use a year later.

### **Source:**

Villanti AC, Johnson AL, Ambrose BK, et al. Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013-2014). *Am J Prev Med.* 2017;53(2):139-151. doi:10.1016/j.amepre.2017.01.026

## Menthol Cigarettes

### FACT 1

By masking the harshness and soothing the irritation caused by tobacco smoke, flavors make it easier for beginners – primarily kids – to experiment with the product and ultimately become addicted. Menthol has particularly appealing qualities for novice smokers. Menthol is a chemical compound that cools and numbs the throat, reducing the harshness of cigarette smoke and thereby making menthol cigarettes more appealing to youth who are initiating tobacco use.

#### Fast Facts:

- ▶ Flavored cigarettes mask the harshness and reduce irritation caused by tobacco smoke.
- ▶ Flavored tobacco makes it easier for beginners and kids to experiment with tobacco products.
- ▶ Menthol cigarettes are more appealing to youth smokers who are new tobacco users.
- ▶ Menthol cools and numbs the throat during smoking, making cigarette smoke less harsh.
- ▶ Smoking menthol cigarettes is less harsh than traditional cigarettes.
- ▶ Menthol has the additional quality of soothing the irritation of combustible cigarettes, which is why many young people start smoking using menthol.
- ▶ Many young people start smoking using menthol flavors for their cooling effect, reducing the harshness of cigarette smoke.

#### Source:

FDA. Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes (2013).

### FACT 2

Smoking any kind of cigarette, including menthol cigarettes, is harmful and increases risk for serious illness and death. Studies have shown that menthol in cigarettes likely leads people—especially young people—to experiment with smoking. It also could increase a young person's risk of becoming dependent on nicotine. Compared to adults who smoke non-menthol cigarettes, adults who smoke menthol cigarettes make more attempts to quit smoking and have a harder time quitting.

#### Fast Facts:

- ▶ Smoking any kind of cigarette increases the risk of serious illness and death.
- ▶ Smoking menthol cigarettes increases the risk of serious illness and death.
- ▶ Menthol in cigarettes likely leads people to experiment with smoking.
- ▶ Menthol in cigarettes likely leads young people to experiment with smoking.
- ▶ Menthol in cigarettes could increase a young person's risk of becoming nicotine-dependent.
- ▶ Adults who smoke menthol cigarettes have a harder time quitting smoking than those who smoke unflavored cigarettes.
- ▶ Adults who smoke menthol cigarettes make more unsuccessful attempts to quit smoking.
- ▶ Young people may become dependent on nicotine by experimenting with menthol cigarettes.

#### Source:

Mills SD, Henriksen L, Golden SD, et al. Disparities in retail marketing for menthol cigarettes in the United States, 2015. *Health Place*. 2018;53:62–70. doi:10.1016/j.healthplace.2018.06.011

### FACT 3

Menthol cigarettes are used at disproportionately higher rates by racial and ethnic minority smokers, including African Americans (84.6%), Hispanics or Latinos (46.9%) and Asian Americans (38%), compared to White smokers (28.9%).<sup>(16)</sup> Also, approximately 71% of all young LGBT smokers use menthol cigarettes. At least half of all teen smokers use menthol tobacco products, including more than 70% of adolescent African American smokers and more than half of all adolescent Latino smokers.

#### Fast Facts:

- ▶ Racial and ethnic minority smokers are more likely to use menthol cigarettes compared to white smokers.
- ▶ The vast majority of African Americans smokers use menthol cigarettes.
- ▶ Nearly 85% of African American smokers use menthol cigarettes.
- ▶ Nearly half of Latino smokers use menthol cigarettes.
- ▶ More than 35% of Asian American smokers use menthol cigarettes.
- ▶ A majority of young LGBT smokers use menthol cigarettes.
- ▶ More than 70% of young LGBT smokers use menthol cigarettes.
- ▶ At least half of all teen smokers use menthol tobacco products.
- ▶ Nearly 3 in 4 youth African American smokers use menthol tobacco products.

#### Source:

Villanti AC, Mowery PD, Delnevo CD, Niaura RS, Abrams DB, Giovino GA. Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004-2014. *Tob Control*. 2016;25:ii14-ii20. Doi:10.1136/tobaccocontrol-2016-053329.

National Youth Advocacy Coalition, *Coming Out About Smoking: A Report from the National LGBTQ Young Adult Tobacco Project* (2010).

### FACT 4

Price promotions for Newport menthol cigarettes are also more common in neighborhoods with more Black residents and this pattern was unique to the brand. Given the disproportionate retail advertising for menthol cigarettes and targeted use of Newport price promotions, it is not surprising that more than 80% of Black smokers use menthol cigarettes and Newport is the preferred brand.... The pack price of Newport Full Flavor (menthol) cigarettes was cheaper in neighborhoods with more Black, youth and lower-income residents. The Newport Full Flavor (menthol) pack price was cheapest in neighborhoods with the highest percentage of Black residents and the lowest median household incomes.

#### Fast Facts:

- ▶ The cigarette company Newport frequently runs price discounts for menthol cigarettes in neighborhoods with more Black residents.
- ▶ The cigarette company Newport more frequently discounts menthol cigarettes in predominantly black neighborhoods than in predominantly white neighborhoods.
- ▶ The pack price of Newport Full Flavor (menthol) cigarettes is often cheaper in neighborhoods with more Black, youth and lower-income residents.
- ▶ In a 2018 study, the Newport Full Flavor (menthol) pack price was cheapest in neighborhoods with the higher percentages of Black residents and lower median income households.
- ▶ Newport is the preferred brand of Black smokers and a 2018 study showed the cigarette company targets neighborhoods with high percentage Black residents with disproportionate retail advertising.

#### Source:

Mills SD, Henriksen L, Golden SD, et al. Disparities in retail marketing for menthol cigarettes in the United States, 2015. *Health Place*. 2018;53:62-70. doi:10.1016/j.healthplace.2018.06.011

## FACT 5

Consistent with previous research (Gardiner & Clark, 2010; Author, 2015), retail menthol advertising was more common in neighborhoods with more Black and lower-income residents. These findings suggest that, when controlling for other neighborhood demographics, retail menthol advertising is targeted to neighborhoods with more Black residents, but not related to Asian/Pacific Islander or Hispanic racial/ethnic group demographics.

### Fast Facts:

- ▶ In-store advertising for menthol cigarettes is more common in neighborhoods with more Black and lower-income residents.
- ▶ Studies show that in-store advertising for menthol cigarettes is targeted to neighborhood with more Black residents.
- ▶ Cigarette companies target neighborhood with more Black residents with in-store advertising for menthol cigarettes.

### Source:

Mills SD, Henriksen L, Golden SD, et al. Disparities in retail marketing for menthol cigarettes in the United States, 2015. *Health Place*. 2018;53:62-70. doi:10.1016/j.healthplace.2018.06.011.

## FACT 6

study suggest that menthol cigarettes are marketed extensively in the retail environment, especially in neighborhoods with higher proportions of Black, Asian/PI, youth and lower-income residents. Disparities in menthol cigarette marketing varied by type of marketing and cigarette brand.

### Fast Facts:

- ▶ Menthol cigarettes are marketed extensively in retail settings in minority and low-income neighborhoods.
- ▶ Cigarette companies target low-income neighborhoods with in-store advertising for menthol cigarettes.
- ▶ Cigarette companies target neighborhoods with higher percentages of minority residents with in-store advertising for menthol cigarettes.
- ▶ Cigarette companies target low-income neighborhoods with in-store advertising for menthol cigarettes.
- ▶ Menthol cigarettes are marketed extensively in neighborhoods with high proportions of youth residents.

### Source:

Mills SD, Henriksen L, Golden SD, et al. Disparities in retail marketing for menthol cigarettes in the United States, 2015. *Health Place*. 2018;53:62-70. doi:10.1016/j.healthplace.2018.06.011



## Nicotine and E-Cigarettes Can Have Adverse Health Effects

### FACT 1

Cigarette smoking is the leading preventable cause of death in the United States, causing more than 480,000 deaths each year—nearly 20 percent of all deaths. Smoking cigarettes leads to disease and disability and harms nearly every organ of the body.

#### Fast Facts:

- ▶ Smoking is the leading cause of death in the United States.
- ▶ Smoking cigarettes can cause harm to nearly every organ of the body.
- ▶ Smoking cigarettes can lead to death and disability.
- ▶ Smoking results in nearly one in five deaths in the United States.

#### Source:

U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: 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, 2014.

### FACT 2

Secondhand smoke causes premature death and disease in children and adults who do not smoke. There is no risk-free level of exposure to secondhand smoke and more than 50 carcinogens have been identified in secondhand smoke. Since the 1964 Surgeon General's Report, 2.5 million adults who were nonsmokers died because they breathed secondhand smoke.

#### Fast Facts:

- ▶ Secondhand smoke can cause death and disease in children and adults who do not smoke.
- ▶ There is no safe level of exposure to secondhand smoke.
- ▶ Any exposure to secondhand smoke can be harmful.
- ▶ More than 50 carcinogens have been identified in secondhand smoke.
- ▶ 2.5 million nonsmokers have died because of exposure to secondhand smoke.

#### Source:

U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: 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, 2014.

U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: 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, 2006.

### FACT 3

Exposure to nicotine during adolescence can harm brain development, which can affect learning, memory, and attention. Youth use of nicotine can also increase their risk for future addiction to other drugs.

#### Fast Facts:

- ▶ Exposure to nicotine during adolescence harms brain development.
- ▶ Exposure to nicotine during adolescence can harm children's and teens' learning, memory, and attention span.
- ▶ Using nicotine as an adolescent can increase the risk of addiction to other drugs.

#### Source:

U.S. Department of Health and Human Services. 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.

#### FACT 4

In addition to nicotine, the aerosol from e-cigarettes can potentially expose both users and bystanders to harmful substances such as heavy metals, volatile organic compounds, and ultrafine particles that can be inhaled deeply into the lungs.

##### **Fast Facts:**

- ▶ E-cigarettes contain multiple harmful materials in addition to nicotine.
- ▶ E-cigarette use can expose adolescents to harmful substances like heavy metals, volatile organic compounds, and ultrafine particles that can be inhaled deeply into the lungs.
- ▶ Heavy metals, ultrafine particles and volatile organic compounds are some of the harmful substances found in the aerosol of e-cigarettes.
- ▶ Users and bystanders can be exposed to harmful materials present in the aerosol from e-cigarettes.
- ▶ E-cigarettes contain not only addictive chemicals like nicotine but also heavy metals, volatile organic compounds and ultrafine particles found in aerosol.

##### **Source:**

U.S. Department of Health and Human Services. 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.

#### FACT 5

A typical JUUL cartridge, or “pod,” contains about as much nicotine as a pack of 20 regular cigarettes. Some e-cigarette cartridges use nicotine salts, which allow a higher level of nicotine to be inhaled more easily and with less irritation than the free-base nicotine that has traditionally been used in tobacco products. According to a 2015 study, 5.8% of high school seniors used both e-cigarettes and traditional cigarettes.

##### **Fast Facts:**

- ▶ A typical JUUL pod contains about as much nicotine as a pack of 20 regular cigarettes.
- ▶ Many e-cigarettes use nicotine salts, which allows the user to inhale more nicotine with less irritation.
- ▶ Using e-cigarettes can lead young people to nicotine dependence and the use of other tobacco products like traditional cigarettes.
- ▶ In 2015, 5.8% of high school seniors used both e-cigarettes and traditional cigarettes.
- ▶ JUUL pods contain about as much nicotine as a pack of cigarettes.
- ▶ E-cigarettes that use nicotine salts allow for easy consumption of higher levels of nicotine than other tobacco products.
- ▶ E-cigarettes can contain more nicotine, an addictive substance, than traditional tobacco products.
- ▶ Using 1 JUUL pod can expose youth to as much nicotine as smoking a full pack of 20 cigarettes.
- ▶ When it comes to nicotine, 1 JUUL pod = 1 pack of cigarettes.

##### **Source:**

Willett JG, Bennett M, Hair EC, et al. Recognition, use and perceptions of JUUL among youth and young adults. *Tob Control*. 2018. Epub ahead of print. doi: 10.1136/tobaccocontrol-2018-054273.

## FACT 6

A 2018 survey of high school students by the National Institute of Drug Abuse found that 43.4% of high school seniors who use e-cigarettes did not know they were inhaling nicotine, including 25.7% who thought that they were inhaling only flavoring and 13.7% who thought they were inhaling marijuana or hash oil. By comparison, 29.7% of high school seniors who use e-cigarettes were aware that they were inhaling nicotine.

### **Fast Facts:**

- ▶ In a 2018 survey, more than a quarter of high school seniors who use e-cigarettes thought they were inhaling only flavoring.
- ▶ In a 2018 survey, less than 30% of high school seniors who use e-cigarettes were aware they were inhaling nicotine.
- ▶ A fourth of high school seniors who use e-cigarettes thought they were inhaling “only flavoring” and not harmful chemicals like nicotine.
- ▶ Many students who use e-cigarettes are not aware of the chemicals, including nicotine, that they contain.
- ▶ Less than a third of high school seniors who use e-cigarettes were aware that they are inhaling nicotine, according to a 2018 survey.

### **Source:**

National Institute for Health, National Institute on Drug Abuse. Monitoring the Future 2018 Survey Results. December 2018. <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2018-survey-results>

## Tobacco and E-cigarette Companies Market their Products Extensively and Have Intentionally Marketed their Products to Kids

### FACT 1

According to the Federal Trade Commission, major tobacco companies Altria Group, ITG Holdings USA, Reynold America, and Vector Group spent \$8.6 billion in 2017 on advertising, amounting to more than \$23 million every day.

#### Fast Facts:

- ▶ Major tobacco companies spent more than \$8.5 billion in 2017 on advertising.
- ▶ In 2017, major tobacco companies spent more than \$23 million every day advertising their products.

#### Source:

Federal Trade Commission, Federal Trade Commission Cigarette Report for 2017. United States, 2019.

### FACT 2

A study based on data from the National Youth Tobacco Survey found that 90.7% of middle school and 92.9% of high school students were exposed to pro-tobacco ads in stores, in magazines or on the internet in 2011.

#### Fast Facts:

- ▶ The vast majority of middle and high school students are exposed to advertising promoting tobacco products.
- ▶ In 2011, 90.7% of middle school students were exposed to pro-tobacco advertising.
- ▶ In 2011, 92.9% of high school students were exposed to pro-tobacco advertising.

#### Source:

Dube SR, Arrazola RA, Lee J, Engstrom M, Malarcher A. Pro-tobacco influences and susceptibility to smoking cigarettes among middle and high school students—United States, 2011. *J Adolesc Health*. 2013;52(5 Suppl):S45–S51. doi:10.1016/j.jadohealth.2012.07.007

### FACT 3

The 2016 National Youth Tobacco Survey found that 78.2% of middle and high school students—20.5 million youth—had been exposed to e-cigarette advertisements from at least one source.

#### Fast Facts:

- ▶ In 2016, more than 20 million middle and high school students were exposed to e-cigarette advertisements.
- ▶ In 2016, nearly 80% of middle and high school students were exposed to e-cigarette advertisements.

#### Source:

Marynak, K, et al., "Exposure to Electronic Cigarette Advertising Among Middle School and High School Students—United States, 2014–2016," *Morbidity and Mortality Weekly Report (MMWR)* 67(10):294–299, March 16, 2018.

#### FACT 4

A 2016 study found a significant association between exposure to e-cigarette marketing via the Internet, print, retail, and TV/movies and current e-cigarette use among middle and high school students. With each additional exposure to another channel of e-cigarette marketing, students' likelihood of ever using e-cigarettes increased by 16%.

#### Fast Facts:

- ▶ There is a significant association between exposure to e-cigarette advertising and e-cigarette use among middle and high school students.
- ▶ Many middle and high school students who used e-cigarettes in 2016 had also been exposed to e-cigarette advertisements.
- ▶ Additional exposure to e-cigarette advertising can increase the likelihood that middle and high school students will use e-cigarettes.

#### Source:

Mantey, D, et al. "E-Cigarette Marketing Exposure is Associated With E-Cigarette Use Among US Youth," *Journal of Adolescent Health*, 58(6), 686-690. United States, 2019.

#### FACT 5

Among youth who had never used e-cigarettes, exposure to e-cigarette marketing via Internet, print, retail, and TV/movies was significantly associated with susceptibility to e-cigarette use. Moreover, among youth who had never used e-cigarettes, with each additional exposure to another channel of e-cigarette marketing, students' odds of susceptibility to e-cigarette use increased by 1.1. For students who were exposed to four channels of e-cigarette marketing, the odds of current e-cigarette use increased by 1.52.

#### Fast Facts:

- ▶ Exposure to e-cigarette advertising can increase the likelihood of middle and high school students to use e-cigarettes.
- ▶ Exposure to e-cigarette advertising across multiple platforms increases the likelihood that middle and high school students will try e-cigarettes.
- ▶ Among middle and high school students who have never used e-cigarettes, each additional exposure to another channel of e-cigarette marketing increases the odds that the student will try an e-cigarette by 1.1.
- ▶ For students who were exposed to e-cigarette advertisements across four channels, the odds that they would try an e-cigarette increased by 1.52.
- ▶ Exposure to e-cigarette advertising can increase the likelihood of middle and high school students to use e-cigarettes.
- ▶ Exposure to e-cigarette advertising across multiple platforms increases the likelihood that middle and high school students will try e-cigarettes.

#### Source:

Mantey, D, et al. "E-Cigarette Marketing Exposure is Associated With E-Cigarette Use Among US Youth," *Journal of Adolescent Health*, 58(6), 686-690. United States, 2019.

## FACT 6

Juul is the most popular e-cigarette manufacturer, currently controlling about three quarters of the e-cigarette market share in the United States. In 2018, Altria Group announced a \$12.8 billion investment in Juul resulting in 35% ownership of the company.

### Fast Facts:

- ▶ Juul is the most popular e-cigarette on the market.
- ▶ Juul sales represent 68% of all e-cigarette sales.
- ▶ Juul sales account for more than two-thirds of the total e-cigarette sales.
- ▶ Major tobacco company Altria invested \$12.8 billion in Juul.
- ▶ Major tobacco company Altria owns 35% of Juul.
- ▶ Altria, makers of Marlboro cigarettes, owns 35% of Juul.

### Source:

Nielsen Total US xAOC/Convenience Database & Wells Fargo Securities, LLC, in Wells Fargo Securities, Nielsen Tobacco All Channel Data Through 5/18, May 28, 2019

Altria Group, Inc., "Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth," Press Release, <http://investor.altria.com/file/Index?KeyFile=396169695>

## FACT 7

Juul used organic social media platforms and posts to advertise their products. From 2015–2018, more than 250,000 posts were shared with #Juul. When Juul decided to stop promoting their products on social media, the rate of community posting accelerated markedly resulting in the number of posts doubling to more than half a million.

### Fast Facts:

- ▶ Juul used social media sites frequently to promote their products.
- ▶ Over the nearly 3.5 years that Juul posted on social media using #Juul, more than a quarter of a million posts appeared.
- ▶ After halting the use of #Juul, community posting increased markedly.
- ▶ More than half a million posts have been shared on social media platforms using #Juul.

### Source:

R. Jackler, D. Ramamurthi, N. Louis-Ferdinand. "Rapid Growth of JUUL Hashtags After the Company Ceased Social Media Promotion," Stanford Research into the Impact of Tobacco Advertising, Stanford University School of Medicine. July 18, 2019.

## FACT 8

An analysis of the followers of @JUULVapor on Twitter found that nearly half of the brand's followers were predicted to be younger than the legal age to purchase e-cigarettes and may be exposed to JUUL's marketing on social media. 44.9% of @JUULVapor's followers were estimated to be 13 to 17 years of age. 43.6% of @JUULVapor's followers were estimated to be 18 to 24 years of age. Only 11.5% of @JUULVapor's followers were estimated 25 years or older.

### Fast Facts:

- ▶ Nearly 45% of Juul's followers on Twitter are not old enough to purchase tobacco legally.
- ▶ 88.5% of Juul's followers on Twitter are under the age of 25.
- ▶ A significant majority of Juul's followers on Twitter are teens or young adults.
- ▶ Less than 12% of Juul's followers on Twitter are over the age of 25.

### Source:

Kim AE, Chew R, Wenger M, et al. Estimated Ages of JUUL Twitter Followers. *JAMA Pediatr.* 2019;173(7):690–692. doi: <https://doi.org/10.1001/jamapediatrics.2019.0922>

## FACT 9

Juul paid popular social media users to post content featuring Juul products. These influencers were given a unique link to purchase products and paid up to 25% of net sales for new customers. Influencers were instructed not to share that they were being compensated.

### **Fast Facts:**

- ▶ Juul paid social media users to promote their products online.
- ▶ Juul gave social media influencers a cut of up to 25% of the sales from new customers they generated through social media posts.
- ▶ Juul paid social media influencers to promote their products online but asked them not to share that they were being paid.
- ▶ Influencers were asked to promote Juul on social media without disclosing that their posts were ads.
- ▶ Social media influencers were paid up to 25% of the sales generated by promoting Juul products to their audiences.

### **Source:**

R. Jackler, et al. "JUUL Advertising Over its First Three Years on the Market," Stanford Research into the Impact of Tobacco Advertising, Stanford University School of Medicine. January 31, 2019.

## Youth E-cigarette Usage is An Epidemic

### FACT 1

According to the CDC's 2019 National Youth Tobacco Survey, 27.5% of high school students reported using an e-cigarette within the past 30 days. This is a 32% increase from the 2018 rate of 20.8% and a 135% increase from the 2017 rate of 11.7%.

#### Fast Facts:

- ▶ E-cigarette use among high school students is rising dramatically.
- ▶ In 2019, more than one-quarter of high school students reported using an e-cigarette in the past 30 days.
- ▶ More than 27% of high school students reported recent use of e-cigarettes in 2019.
- ▶ In 2018, more high school students reported being current e-cigarette users than ever before.
- ▶ In an average high school class of 20 students, at least 5 have likely used an e-cigarette this month.

#### Sources:

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. *MMWR Surveill Summ* 2019;68(No. SS-12):1–22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1>

Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco Product Use Among Middle and High School Students — United States, 2011–2018. *MMWR Morb Mortal Wkly Rep* 2019;68:157–164. DOI: <http://dx.doi.org/10.15585/mmwr.mm6806e1>

### FACT 2

According to the CDC's 2019 National Youth Tobacco Survey, 10.5% of middle school students reported using an e-cigarette within the past 30 days. This is a 114% increase from the 2018 rate of 4.9%. Among middle school students who used e-cigarettes, 18% indicated they used them on more than 20 days during the preceding month.

#### Fast Facts:

- ▶ E-cigarette use among middle school students is rising dramatically.
- ▶ More than 10% of middle school students reported using an e-cigarette in the past 30 days.
- ▶ The number of middle school students who reported using an e-cigarette in the past 30 days more than doubled between 2018 and 2019.
- ▶ The number of middle school students who reported using an e-cigarette in the past 30 days increased by 114% between 2018 and 2019.
- ▶ More middle school students reported using e-cigarettes within the last 30 days in 2019 compared to 2018.
- ▶ If a middle school soccer team has 30 students, 3 of them have probably used an e-cigarette this month.
- ▶ Twice as many middle schoolers were current users of e-cigarettes in 2019 than in 2018.
- ▶ Of middle school e-cigarette users, 18% are using the products more days than not in a month.
- ▶ Nearly 1 in 5 middle school e-cigarette users are using them frequently (20+ days per month).

#### Sources:

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. *MMWR Surveill Summ* 2019;68(No. SS-12):1–22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1>

Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco Product Use Among Middle and High School Students — United States, 2011–2018. *MMWR Morb Mortal Wkly Rep* 2019;68:157–164. DOI: <http://dx.doi.org/10.15585/mmwr.mm6806e1external icon>



### FACT 3

5.4 million middle and high school students used e-cigarettes in 2019, up from 3.6 million in 2018.

#### Fast Facts:

- ▶ More than 5 million middle and high school students used e-cigarettes in 2019.
- ▶ More than 5 million youth used e-cigarettes in 2019.
- ▶ In 2019, an additional 1.8 million middle and high school students used e-cigarettes compared to 2018.
- ▶ The number of middle and high school students who used e-cigarettes in 2019 increased by 50% compared to 2018.
- ▶ You could fill the largest NFL stadium's seats 64 times with the students who used e-cigarettes last year and you'd still need a 65th to fit the rest.
- ▶ In 2018, you would need at least 50,000 school buses to fit all of the students who used e-cigarettes that year. In 2019, you would need 75,000.
- ▶ The number of students who used e-cigarettes in 2019 went up by 47% from 2018.

#### Sources:

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

MetLife Stadium Seating Capacity - 82,500: <https://www.metlifestadium.com/stadium/about-us>

72 passenger school bus capacity: <https://one.nhtsa.gov/people/injury/buses/pub/numseat.hmp.html>

### FACT 4

In 2019, 34.2% of high school students who used e-cigarettes reported using them on more than 20 days during the preceding month, a 23% increase from 2018.

#### Fast Facts:

- ▶ In 2019, 34% of high school students who used e-cigarettes used them on more than 20 days during the preceding month.
- ▶ The number of high school students who used e-cigarettes frequently (more than 20 days) increased by 22% from 2018 to 2019.
- ▶ From 2018 to 2019, the number of high school students who used e-cigarettes on more than 20 days during the preceding month increased by 22%.
- ▶ More than one-third of high school students who use e-cigarettes are using frequently (more than 20 days in a month).
- ▶ The number of high school students who use e-cigarettes frequently increased by 22% in the past year.
- ▶ More than one-third of high schoolers who use e-cigarettes are using them on more days in the month than not.
- ▶ One in every three students using e-cigarettes are using them on most days in a month.

#### Source:

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

US Food and Drug Administration, 2018 NYTS Data: A Startling Rise in Youth E-cigarette Use, 2018. <https://www.fda.gov/tobacco-products/youth-and-tobacco/2018-nyts-data-startling-rise-youth-e-cigarette-use>

## FACT 5

In 2019, an estimated 970,000 middle and high school students who used e-cigarettes used them daily, including 21.4% of high school e-cigarette users and 8.8% of middle school e-cigarette users.

### Fast Facts:

- ▶ An estimated 970,000 middle and high school students use e-cigarettes daily.
- ▶ More than 20% of high school students who use e-cigarettes use them daily.
- ▶ Nearly 10% of middle school students who use e-cigarettes use them daily.
- ▶ You could fill over 13,800 school buses with only middle and high school students who use e-cigarettes daily.

### Sources:

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

72 passenger school bus capacity: <https://one.nhtsa.gov/people/injury/buses/pub/numseat.hmp.html>

## FACT 6

Among high school students, e-cigarettes are the most commonly used tobacco product. In 2019, 27.5% of high school students indicated they used e-cigarettes while 5.8% indicated they used traditional cigarettes.

### Fast Facts:

- ▶ A significantly higher percentage of high school students use e-cigarettes compared to traditional cigarettes.
- ▶ E-cigarettes are the most popular tobacco product among high school students.
- ▶ More than 25% of high school students use e-cigarettes compared to nearly or approximately 6% of high schoolers who use traditional cigarettes.
- ▶ More than four times as many high school students use e-cigarettes compared to those who use traditional cigarettes.
- ▶ The share of high schoolers using traditional cigarettes has dropped to nearly 6% while use of e-cigarettes has jumped to nearly 28% of the total high school population.
- ▶ Fewer than 6% of high school students used traditional cigarettes while nearly 28% used e-cigarettes in 2019.

### Source:

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. MMWR Surveill Summ 2019;68(No. SS-12):1-22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1>

## FACT 7

According to the 2019 National Youth Tobacco Survey, 63.6% of high school students who use e-cigarettes and 65.4% of middle school students who use e-cigarettes reported that they did not use any other tobacco product.

### Fast Facts:

- ▶ Nearly two-thirds of both middle and high school students who use e-cigarettes do not use any other tobacco product.
- ▶ More than 63% of high school e-cigarette users do not use other tobacco products.
- ▶ More than 65% of middle school e-cigarette users do not use other tobacco products.
- ▶ Most middle and high school students who use e-cigarettes do not use other tobacco products.

**Fast Facts  
(continued):**

- ▶ Most students who are using e-cigarettes report not using any other tobacco product
- ▶ The majority of school-aged tobacco users report exclusively using e-cigarettes.

**Sources:**

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

**FACT 8**

In 2019, 59.1% of high school e-cigarette users and 54.1% of middle school e-cigarette users reported that JUUL was their usual e-cigarette brand.

**Fast Facts:**

- ▶ JUUL is the most popular e-cigarette brand among middle and high school students.
- ▶ Nearly 60% of high school e-cigarette users reported that JUUL was their usual e-cigarette brand.
- ▶ More than half of middle school e-cigarette users reported that JUUL was their usual e-cigarette brand.

**Source:**

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019;322(21):2095-2103. doi: <https://doi.org/10.1001/jama.2019.18387>

**FACT 9**

The 2019 National Youth Tobacco Survey shows that 23% of middle and high school students – a total of 6.2 million youth – have used a tobacco product in the past 30 days. E-cigarettes were the most commonly used tobacco product among youth, with 27.5% of high school students and 10.5% of middle school students using them. E-cigarettes were followed by (in order): cigars, cigarettes, smokeless tobacco, hookahs, and pipe tobacco. The report also details how young people are targeted by the tobacco industry: nearly 9 out of 10 middle and high school students (22.9 million) report exposure to advertisements for tobacco products, nearly 70% of whom reported exposure to e-cigarette marketing specifically.

**Fast Facts:**

- ▶ In 2019, 6.2 million middle and high school students reported using a tobacco product in the past 30 days.
- ▶ Nearly 1 in 4 middle and high school students reported using a tobacco product in the past 30 days.
- ▶ E-cigarettes are the most commonly used tobacco product by high school students.
- ▶ More than 27% of high school students use e-cigarettes.
- ▶ More than 10% of middle school students use e-cigarettes.
- ▶ Nearly 9 out of 10 middle and high school students have been exposed to advertisements for tobacco products.
- ▶ Nearly 70% of middle and high school students have been exposed to advertisements for e-cigarettes.
- ▶ Nearly 23 million students in grades 6-12 have been exposed to advertisements for tobacco products.
- ▶ Over 6 million middle and high school students are considered current tobacco users. (Use within the past 30 days)
- ▶ 1 in 10 students in the 6th-8th grade report using e-cigarettes.

**Source:**

Wang TW, Gentzke AS, Creamer MR, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019. MMWR Surveill Summ 2019;68(No. SS-12):1-22. DOI: <http://dx.doi.org/10.15585/mmwr.ss6812a1>