Written Testimony of Matthew L. Myers

President

Campaign for Tobacco-Free Kids

Before the House of Representatives Committee on Oversight and Reform Subcommittee on Economic and Consumer Policy

Hearing: Examining JUUL's Role in the Youth Nicotine Epidemic: Part II

July 25, 2019

Chairman Krishnamoorthi, Ranking Member Cloud, and Members of the Subcommittee, my name is Matthew L. Myers, President of the Campaign for Tobacco-Free Kids. The Campaign for Tobacco-Free Kids works to reduce tobacco use and its deadly consequences in the United States and around the world. We promote the adoption of proven solutions to reduce tobacco use and save lives. I appreciate the opportunity to testify today on JUUL and its role in creating what the FDA and Surgeon General have called an "epidemic" of e-cigarette use among the nation's youth.

JUUL's Role in the Youth E-Cigarette Epidemic

While our nation has made great progress over the last several decades in reducing youth tobacco use, that progress is being threatened by the dramatic recent increase in youth e-cigarette use. Between 2017 and 2018, e-cigarette use increased by 78 percent among high school students and by 48 percent among middle school students.¹ According to the most recent data, 2.8% of adults were current e-cigarette users compared to 20.8% of high school students.² JUUL is by far the most popular e-cigarette on the market. A recent Truth Initiative analysis found that teens aged 15-17 have 16 times greater odds of using JUUL than 25- to 34-year olds.³

In 2018, more than 3.6 million middle and high school students were e-cigarette users – an increase of 1.5 million students in just one year. Prior to the introduction of e-cigarettes, and especially JUUL, we had seen a continuous decline in recent years in the number of youth using tobacco. The increase in e-cigarette use has reversed that trend and has led to a 38 percent increase in the number of young people who use of tobacco products. Alarmingly, the percentage of kids now using tobacco products that contain nicotine is at rates not seen since 2004. ⁴ Both the Surgeon General and the U.S. Food and Drug Administration (FDA) have called youth use of e-cigarettes an epidemic. The evidence is overwhelming and beyond dispute.

In addition, studies have found that young people who use e-cigarettes are more likely to become smokers, and many are low-risk youth who would not have otherwise smoked cigarettes.⁵ A January 2018 report by the National Academies of Sciences, Engineering and Medicine concluded, "There is substantial evidence that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults." One recent study found that youth who used e-cigarettes were four times more likely to subsequently try cigarettes and three times more likely to be a current cigarette smoker.

This problem is even more serious for two additional reasons. First, multiple studies show that a large percentage of young people who are using Juul and other e-cigarettes are kids who are among those least at risk of cigarette smoking. For these kids, e-cigarettes are not replacing cigarettes; they are turning non-tobacco users into tobacco users. The latest National Youth Tobacco Survey data shows that, among current youth users of any tobacco product, 42% of high school students were exclusive users of e-cigarettes.

Second, there is a myth that kids are just experimenting with e-cigarettes but not becoming addicted in large numbers. The data tell a different story. A greater percentage of high school students who have used an e-cigarette within the past 30 days do so on 20 or more days a month than is the case for high school students who have used a cigarette within the last 30 days (27.7% vs. 23.1%). In fact, in 2018 more than 3 times as many high school students were using e-cigarettes frequently than were using cigarettes frequently. Perhaps to some people having over 900,000 kids a year becoming addicted to e-cigarettes is not a high enough number to cause concern, but to us it is unacceptable. ¹⁰

JUUL deserves a significant portion of the blame for this epidemic. With both its launch in 2015 and its marketing of JUUL subsequently, JUUL led to an explosive growth in the use of ecigarettes by youth, unprecedented in magnitude. It was a powerful combination of a product that is sleek, cool, high tech, and discreet, that comes in sweet flavors and provides an extraordinarily powerful hit of nicotine. As far as youth use and addiction, JUUL changed everything. The number of youth using and becoming addicted to these products skyrocketed.

JUUL is Big Tobacco 2.0

Despite Juul repeatedly claiming that it is not "big tobacco," the company's actions paint a very different picture. JUUL has followed a sophisticated playbook perfected by the tobacco industry—targeting kids to build an addicted customer base for years to come even while claiming that they don't want kids to JUUL, lobbying against effective tobacco control policies, and engaging in public relations campaigns to draw attention away from the youth epidemic they helped create.

After touting that it is independent of the tobacco industry, in December 2018 JUUL sold a 35% share of its company to Altria, maker of Marlboro – the most popular cigarette among youth smokers. However, this was not the company's first interaction with the tobacco industry. JUUL had also been in in discussions with Japan Tobacco International (JTI) and British American Tobacco (BAT) prior to selling a share of the company to Altria. In 2011, JUUL's cofounders sold a minority stake of their original e-cigarette company, Ploom, to JTI, and later sold them the Ploom brand name and intellectual property. JUUL's financial ties to the big tobacco companies should not be a surprise given the company has behaved exactly like the tobacco industry for years.

JUUL's Youth-Friendly Marketing Launch Replicated Big Tobacco's Playbook

What is most striking about how JUUL was launched and the images it used in its marketing is how closely they resembled the images and tactics used by the cigarette industry so successfully for decades until they were forced by the lawsuits from the states to stop. JUUL adapted their strategies to maximize the impact of new media. The use of social media by JUUL not only enabled it to reach youth directly, it allowed it to advertise without being noticed by parents or government regulators. When JUUL first launched in 2015, the company used colorful, eye-catching designs and youth-oriented imagery and themes, such as young people dancing and using JUUL. JUUL's original marketing campaign included billboards in New York City's Times Square, YouTube videos, advertising in one youth friendly magazine – Vice – that markets itself as the #1 youth media company, and launch parties that were highly attractive to young people. ¹⁴

As noted in Dr. Jackler's testimony yesterday, JUUL's marketing did change after the first six months, but the themes – pleasure, romance, satisfaction and relaxation – and images in JUUL's advertising that were then used for multiple years were exactly the kind that spurred the popularity of brands like Marlboro, Newport and others and harken back to traditional tobacco advertising. Many of JUUL's advertising tactics – like their billboard in Times Square and free sampling events – were popularized by the tobacco industry and subsequently banned for cigarette advertising as a result of the Master Settlement Agreement and Tobacco Control Act precisely because of their youth appeal. The images and themes in JUUL's marketing changed, but did not become less youth-focused until after FDA shined a harsh spotlight on their tactics.

While JUUL today claims their launch advertising had little impact on sales, the marketing company that created the 2015 launch campaign tells a very different story, claiming that the campaign "created ridiculous enthusiasm" for the campaign hashtag, part of a larger advertising effort that included music event sponsorships and retail marketing. ¹⁵ A report published by Stanford University researchers concluded that JUUL's marketing launch was, "patently youth oriented" ¹⁶

Social media continued to fuel JUUL's popularity, with lasting effects. JUUL was one of the first major e-cigarette brands to rely heavily on social media to market and promote its products. Eight out of 10 of JUUL's Twitter followers in April 2018 were between the ages of 13 to 20. Additionally, user-generated posts that tag and feature JUUL do not have any restrictions. While JUUL claims that it engaged in this type of social media only briefly, JUUL-sponsored social media continued throughout 2017 and did not come to a close until the media and finally, FDA shined a spotlight on the activity

JUUL officials claim that its popularity among youth is purely accidental and that the product's viral social media presence following its launch was beyond the company's control. However, all of the evidence tells a different story. JUUL has bragged that it studied carefully the documents obtained from the cigarette companies in the 1990's. It learned its lessons well. One former senior manager at JUUL has indicated that the company was aware that the campaign may appeal to youth and was aware shortly after the launch that kids were using JUUL because kids were posting photos of themselves on social media vaping. 19

In a recent CNBC series on the youth e-cigarette epidemic, JUUL CEO Kevin Burns claimed that he would say he is sorry to parents whose children use the company's e-cigarettes, adding, "I hope there was nothing that we did that made it appealing to them." Listen carefully to what he didn't say. Just as JUUL's partner Altria, the creator of the Marlboro Man and one of the most successful marketing campaigns to youth in history, he refused to acknowledge that JUUL's marketing fueled the epidemic. To this day, JUUL refuses to take responsibility for its actions and continues to follow the big tobacco playbook—proclaiming loudly that they don't want kids to use their product, while never admitting that their marketing targeted and attracted kids.

Under pressure from the FDA, and as the result of outrage and public criticism from parents, the media, leading health officials and government agencies, JUUL again followed the tobacco industry's playbook: fighting effective government regulation while offering "voluntarily" to amend its marketing code to no longer use models that are as young as those it so successfully used to create JUUL's current image among youth. It later deleted most of its social media presence in late 2018. However, the youth epidemic fueled by JUUL cannot be reversed by simply deleting its Instagram account. Sadly, the genie is already out of the bottle. Today JUUL is successfully attracting kids without having itself to promote its products on social media – kids are now doing it for them!

JUUL Engineered a Highly Addictive and Attractive Product

JUUL popularized a new generation of high-tech e-cigarettes that smoothly and effortlessly deliver a high dose of nicotine in sweet flavors. Just like big tobacco has used additives and design changes to make cigarettes less harsh and more addictive and appealing to new users, ²³ JUUL pioneered a new e-liquid formulation that delivers nicotine more effectively and with less

irritation than earlier e-cigarette models. JUUL also popularized the use of e-cigarettes that use nicotine salts, which according to the Surgeon General, allow users to inhale high levels of nicotine more easily and with less irritation than e-cigarettes that use free-base nicotine. This design makes it easier for youth to initiate use of e-cigarettes.²⁴

The availability of sweet flavors like mango and mint has played a key role in JUUL's popularity among youth. A 2016-2017 FDA study shows that nearly all (97%) of current youth e-cigarette users had used a flavored e-cigarette in the past month and that 70% of youth who use e-cigarettes do so "because they come in flavors I like." The tobacco industry has a long history of using flavors to attract kids and reduce the harshness of their products to make them more appealing to new users, almost all of whom are youth. By masking the harshness of tobacco, flavors make it easier for new users to try tobacco products and ultimately become addicted. They also often lead young people falsely to believe these sweet tasting products pose no harm and are not addictive. They also often lead young people falsely to believe these sweet tasting products pose no harm and are not addictive. They also often lead young people falsely to believe these sweet tasting products pose no harm and are not addictive. They also often lead young people falsely to believe these sweet tasting products pose no harm and are not addictive.

JUUL claims that the nicotine in a JUUL pod is equivalent to that of a pack of 20 cigarettes. The advertised 5% nicotine level by weight made JUUL three or more times as powerful as most ecigarettes on the market prior to 2015. ²⁸ Today JUUL's competitors, seeking to emulate the company's success, have flooded the U.S. market with similar pod-based e-cigarettes that have nicotine levels even higher than 5%, resulting in what some researchers have referred to as a "nicotine arms race." A study from Truth Initiative found that 63 percent of 15-24 year old JUUL users did not know the product always contains nicotine (all pods sold from JUUL do contain nicotine). ³⁰

JUUL Promoted Ineffective Youth Prevention Programs

When JUUL's marketing and the skyrocketing use of JUUL's products by youth became a source of public concern and criticism, JUUL took the same tactic as the tobacco companies did repeatedly years ago. They announced that they would design a school curriculum to tackle the problem. This tactic is a well-worn pathway. First the Tobacco Institute, the industry trade association, and then all the major cigarette companies responded to the outrage over their marketing of cigarettes to young people by producing and then heavily touting a curriculum they designed to discourage tobacco use among kids.

The problem, however, is that the literature is extensive: None of the tobacco programs designed by the cigarette companies were effective at actually reducing youth tobacco use; some were found to make it more likely that young people would start smoking; and all appeared to have been designed more to discourage effective government regulation than discourage youth tobacco use. What is particularly disturbing then about what JUUL did is that with the results of prior industry youth prevention programs being well-known, and their flaws well-documented, JUUL designed and marketed a program that had all of the same flaws and was

marketed in a way that deceptively sought to create an impression of an association with a successful youth prevention program from Stanford.³² Given the sophistication of JUUL and the wealth of literature on the subject, it is hard to believe this was an accident.

Thus, in 2018 JUUL began to contact schools to offer them funding to implement a JUUL-designed youth tobacco prevention curriculum. The curriculum was not evidence-based, left out elements everyone agrees are essential for success, ignored the role of marketing in youth use, left out any reference to the role of flavors, and inadequately described the harms of e-cigarettes like JUUL.³³ The program was required to prominently display JUUL's sponsorship, an association that prior studies demonstrated had a measurable harmful impact on youth because it made them unduly trusting of the sponsoring company and, therefore, more likely to use their products.³⁴ JUUL only discontinued the program after negative press and backlash from the public health community.³⁵

In 2018, JUUL also announced a \$30 million investment in an "advertising campaign aimed at raising awareness and combating underage use." This campaign included full-page ad placements in major newspapers with the headline "What Parents Need to Know About JUUL." However, the majority of these ads don't appear in publications intended to educate parents, but in newspapers like the Wall Street Journal, the New York Times, the Washington Post and Politico. There can be little question – these ads are more about convincing political leaders not to act than educating parents.

JUUL Continues to Undermine Effective Public Health Measures to Protect Youth

JUUL also continues to follow big tobacco's playbook in another way: publicly proclaim to support actions to reduce youth tobacco use, while working behind the scenes to delay, prevent or weaken the public policies that will actually do so.

JUUL worked behind the scenes in opposition to FDA's assertion of its full authority over ecigarettes. Within the last two months, JUUL submitted a brief in a case pending in federal court in Maryland to require that JUUL and other e-cigarette manufacturers file applications to enable FDA to determine which of their products, if any, meet the statutory public health standard. Avoiding meaningful government review is not the action of a company that actually wants to be responsible.

Even JUUL's support for raising the legal age of sale of tobacco products to 21 comes with a cloud that makes it appear that its real goal is to defer stronger action. In late 2018, JUUL began publicly supporting state laws to increase the minimum legal tobacco sales age to 21. In early 2019, JUUL began placing full-page newspaper ads supporting Tobacco 21 in over twenty states and has submitted letters of support and testimony in many states.³⁷ But JUUL has used its support for raising the age of sale to argue that no other regulation of e-cigarettes is necessary and to try to slip into these bills language that would preempt local governments who want to take stronger action, like restricting the sale of flavored tobacco products, from doing so. They

have used these laws to actively push weak proposals that, for example, lack enforcement authority or funding and that seek to penalize youth instead of retailers—bills that health advocates oppose. ³⁸

Conclusion

When e-cigarettes were first introduced, many in the public health community hoped that the companies would behave differently than traditional tobacco companies, that they would support regulation designed to protect young people, that they would submit their products to FDA for review to determine their public health effect, that they would not market to youth or produce products that appeal to youth, and that they would be truthful and transparent. There was an opportunity of an alliance with public health leaders in the quest to dramatically reduce the number of people who die from tobacco use and achieve the goal of creating the first tobaccofree generation. In too many cases, they have done just the opposite.

JUUL's marketing and product design have led to the youth e-cigarette epidemic gripping our nation. Yet when faced with this reality, JUUL continues to publicly proclaim that it doesn't want kids to use tobacco products while taking half steps that fail to address their products' role and fighting regulatory and legislative action that would have the greatest impact in curbing the epidemic. JUUL's actions as the largest e-cigarette manufacturer are inconsistent with its rhetoric. JUUL has driven this epidemic and today more than 1 in 5 high school kids is an e-cigarette user.

We are past the time when we should trust a cigarette company or an e-cigarette company to act responsibly and in a way that benefits public health. Our nation's children deserve better. It is time for the FDA to take strong action to prohibit the sale of flavored e-cigarettes because of their impact on kids, prohibit online sales and the kind of marketing JUUL has used, and set a tight deadline for removing all products that have not received a marketing order from the FDA or have not submitted a completed application for review. Congress should also enact legislation to address the epidemic of youth e-cigarette use, including cracking down on flavored e-cigarettes, raising the tobacco sale age to 21, prohibiting online sales, and increasing funding for the CDC to address this problem.

The Campaign for Tobacco-Free Kids is grateful for your leadership, Mr. Chairman, in calling for this investigation and for working to ensure that the American public is aware of JUUL's actions and that the company is held accountable.

¹ Centers for Disease Control and Prevention (CDC), "Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," *Morbidity and Mortality Weekly Report (MMWR*), 67(45): 1276-1277.

https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s_cid=mm6745a5_w. Current use defined as any use in the past month.

- ² **Youth:** CDC, "Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," *MMWR*, 67(45): 1276-1277. https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s_cid=mm6745a5_w. Current use defined as any use in the past month. *Adults*: CDC, "Tobacco Product Use Among Adults United States, 2017," *MMWR*, 67(44): 1225, https://www.cdc.gov/mmwr/volumes/67/wr/mm6744a2.htm?s_cid=mm6744a2_e. Current use defined as using every day or some days.
- ³ Vallone, DM, et al., "Prevalence and correlates of JUUL use among a national sample of youth and young adults," *Tobacco Control*, published online October 29, 2018.
- ⁴ Centers for Disease Control and Prevention (CDC), "Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," *Morbidity and Mortality Weekly Report (MMWR)*, 67(45): 1276-1277. https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s_cid=mm6745a5_w. Current use defined as any use in the past month.
- ⁵ Barrington-Trimis, JL, et al., "E-Cigarettes and Future Cigarette Use," *Pediatrics*, 138(1), published online July 2016. Wills, TA, et al., "E-cigarette use is differentially related to smoking onset among lower risk adolescents," *Tobacco Control*, published online August 19, 2016.
- ⁶ 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
- ⁷ 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
- ⁸ Barrington-Trimis, JL, et al., "E-Cigarettes and Future Cigarette Use," Pediatrics, 138(1), published online July 2016.
- ⁹ CDC, [©]Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," *Morbidity and Mortality Weekly Report (MMWR)*, 67(45): 1276-1277.
- ¹⁰ CDC, "Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," *Morbidity and Mortality Weekly Report (MMWR)*, 67(45): 1276-1277.
- ¹¹ Altria, "Altria Makes \$12.8 Billion Minority Investment in JUUL to Accelerate Harm Reduction and Drive Growth," December 20, 2018, http://www.altria.com/Media/Press-Releases/Pages/PressReleaseDetails.aspx?reqID=2381292. JUUL Labs, "JUUL Statement about Altria Minority Investment and Service Agreements," December 20, 2018, https://newsroom.JUUL.com/2018/12/20/JUUL-statement-about-altria-minority-investment-and-service-agreements/.
- ¹² Hirsch, L & LaVito, A, "Altria board approves \$13 billion investment in e-cigarette company JUUL," *CNBC*, December 19, 2018, https://www.cnbc.com/2018/12/19/JUUL-altria-boards-approve-altrias-13-billion-investment-in-JUUL.html.
- ¹³ https://www.forbes.com/sites/kathleenchaykowski/2018/12/05/dont-be-shocked-if-big-tobacco-invests-in-JUUL-its-founders-have-allowed-it-before/#51cfd12b7cf5 . https://www.wired.com/2015/04/pax-JUUL-ecig/
- ¹⁴ Jackler, RK, et al., "JUUL Advertising Over its First Three Years,"
- http://tobacco.stanford.edu/tobacco_main/publications/JUUL_Marketing_Stanford.pdf.
- ¹⁵ Richtel, M & Kaplan, S, "Did JUUL Lure Teenagers and Get 'Customers for Life'?," *The New York Times*, August 27, 2018, https://www.nytimes.com/2018/08/27/science/JUUL-vaping-teen-marketing.html.
- ¹⁶ Jackler, RK, et al., "JUUL Advertising Over its First Three Years,"
- http://tobacco.stanford.edu/tobacco_main/publications/JUUL_Marketing_Stanford.pdf.
- ¹⁷ Kim, A, et al., "Estimated Ages of JUUL Twitter Followers," *JAMA Pediatrics*, published online May 20, 2019.
- ¹⁸ Montoya, G, "Pax Labs: Origins with James Monsees," *Social Underground*, January 2015, https://socialunderground.com/2015/01/pax-ploom-origins-future-james-monsees/.
- ¹⁹ Richtel, M & Kaplan, S, "Did JUUL Lure Teenagers and Get 'Customers for Life'?," *The New York Times*, August 27, 2018, https://www.nytimes.com/2018/08/27/science/JUUL-vaping-teen-marketing.html.
- ²⁰ La Vito, A, "As JUUL grapples with teen vaping 'epidemic,' CEO tells parents 'l'm sorry,'" *CNBC*, July 13, 2019, https://www.cnbc.com/2019/07/13/as-JUUL-deals-with-teen-vaping-epidemic-ceo-tells-parents-im-sorry.html.
- ²¹ JUUL Labs, *JUUL Labs Implements New Social Media Policy for Instagram, Facebook and Twitter in Ongoing Effort to Combat Underage Use and Drive Awareness of Mission to Help Adult Smokers*, June 14, 2018, https://support.JUUL.com/learn/read/JUUL-labs-implements-new-social-media-policy.
- ²² JUUL Labs, "JUUL Labs Action Plan," November 13, 2018, https://newsroom.JUUL.com/2018/11/13/JUUL-labs-action-plan/.
- ²³ Campaign for Tobacco-Free Kids, Designed for Addiction: How the Tobacco Industry Has Made Cigarettes More Addictive, More Attractive to Kids and Even More Deadly, June 2014,
- https://www.tobaccofreekids.org/assets/content/what_we_do/industry_watch/product_manipulation/2014_06_19_DesignedforAddiction_web.pd f.
- ²⁴ Office of the Surgeon General, "Surgeon General's Advisory on E-Cigarette Use Among Youth," December 18, 2018, https://e-cigarettes.surgeongeneral.gov/documents/surgeon-generals-advisory-on-e-cigarette-use-among-youth-2018.pdf.
- ²⁵ FDA, "Modifications to Compliance Policy for Certain Deemed Products: Guidance for Industry, Draft Guidance," March 13, 2019, https://www.fda.gov/downloads/TobaccoProducts/Labeling/RulesRegulationsGuidance/UCM633281.pdf.
- ²⁶ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, http://www.cdc.gov/Features/YouthTobaccoUse/.
- ²⁷ Pepper, JK, et al., "Adolescents' interest in trying flavoured e-cigarettes," *Tobacco Control*, 25:ii62-ii66, published online September 15, 2016. Huang, L.-L., et al., "Impact of Non-menthol Flavours in Tobacco Products on Perceptions and Use Among Youth, Young Adults and

Adults: A Systematic Review," *Tobacco Control*, 26(6):709-719, 2017. Kowitt, S.D., et al., "Perceptions and Experiences With Flavored Non-Menthol Tobacco Products: A Systematic Review of Qualitative Studies," *International Journal of Environmental Research and Public Health*, 14(4):338, 2017.

- ²⁸ Jackler, RK, Ramamurthi, D, "Nicotine arms race: JUUL and the high-nicotine product market" *Tobacco Control*, published online February 6, 2019
- ²⁹ Jackler, RK, Ramamurthi, D, "Nicotine arms race: JUUL and the high-nicotine product market" *Tobacco Control*, published online February 6, 2019
- ³⁰ Willett, J, et al., "Recognition, use and perceptions of JUUL among youth and young adults," *Tobacco Control*, published online April 18, 2018. See also: https://truthinitiative.org/news/juul-e-cigarettes-gain-popularity-among-youth.
- ³¹ HHS. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA: HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012, p. 563. National Cancer Institute (NCI), The Role of the Media in Promoting and Reducing Tobacco Use, Smoking and Tobacco Control Monograph No. 19, NIH Pub. No. 07-6242, June 2008, http://cancercontrol.cancer.gov/tcrb/monographs/19/m19 complete.pdf. CDC Office on Smoking and Health, "Tobacco Industry-Sponsored Youth Prevention Programs in Schools."
- http://www.amcno.org/pdf/Tobacco%20industry%20sponsored%20youth%20prevention%20programs CDC%20Office%20on%20Smoki....pdf. 32 Liu, J and Halpern-Felsher, B, "The Juul Curriculum Is Not the Jewel of Tobacco Prevention Education," *Journal of Adolescent Health*, 63: 527–528, 2018.
- ³³ Liu, J and Halpern-Felsher, B, "The JUUL Curriculum Is Not the Jewel of Tobacco Prevention Education," *Journal of Adolescent Health*, 63: 527–528, 2018.
- ³⁴ Farrelly, MC, et al., "Sustaining 'truth': changes in youth tobacco attitudes and smoking intentions after 3 years of a national antismoking campaign," *Health Education Research* 24(1):42-48, 2009.
- ³⁵ See Campaign for Tobacco-Free Kids, "Big Surprise: Tobacco Company Prevention Campaigns Don't Work; Maybe It's Because They Are Not Supposed To," https://www.tobaccofreekids.org/assets/factsheets/0302.pdf.
- ³⁶ JUUL Labs, "JUUL Labs Launches Advertising Campaign Aimed at Raising Awareness and Combating Underage Use," June 6, 2018, https://newsroom.JUUL.com/2018/06/06/advertising-campaign-combating-underage-use/.
- ³⁷ JUUL Labs, "JUUL Labs Taking Action to Push Tobacco 21 Laws in the U.S." March 19, 2019, https://newsroom.JUUL.com/2019/03/19/JUUL-labs-taking-action-to-push-tobacco-21-laws/.
- ³⁸ Kaplan, S, "In Washington, JUUL Vows to Curb Youth Vaping. It Lobbying in States Runs Counter to That Pledge," *New York Times*, April 28, 2019, https://www.nytimes.com/2019/04/28/health/JUUL-lobbying-states-ecigarettes.html. Roberts, A, "Opinion: A bill to raise the age to buy tobacco and e-cigarettes is being pushed by the tobacco and vaping industry. What's wrong with this picture? *Arizona Republic*, April 29, 2019, https://www.azcentral.com/story/opinion/op-ed/laurieroberts/2019/04/29/JUUL-supports-arizona-bill-raise-vaping-age-21-beware/3620459002/.