

**EXAMINING JUUL'S ROLE IN THE YOUTH
NICOTINE EPIDEMIC: PART I**

HEARING

BEFORE THE
SUBCOMMITTEE ON ECONOMIC AND CONSUMER
POLICY
OF THE

**COMMITTEE ON OVERSIGHT
AND REFORM**

HOUSE OF REPRESENTATIVES

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EXAMINING JUUL'S ROLE IN THE YOUTH NICOTINE EPIDEMIC: PART I

Wednesday, July 24, 2019

HOUSE OF REPRESENTATIVES,
COMMITTEE ON OVERSIGHT AND REFORM,
SUBCOMMITTEE ON ECONOMIC AND CONSUMER POLICY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:06 a.m., in room 2154, Rayburn Office Building, Hon. Raja Krishnamoorthi (chairman of the subcommittee) presiding.

Present: Representatives Krishnamoorthi, DeSaulnier, Pressley, Tlaib, Cloud, Grothman, Comer, and Miller.

Mr. KRISHNAMOORTHI.[Presiding.] Good morning. This subcommittee will come to order. Without objection, the chair is authorized to declare a recess of the subcommittee at any time. This hearing is entitled "Examining JUUL's Role in the Youth and Nicotine Epidemic: Part I." I recognize myself for five minutes to give an opening statement.

After years of steady decline, youth nicotine use has suddenly reversed course, seemingly overnight. Between 2017 and 2018, youth e-cigarette use, also known as vaping, rose 78 percent in one year to the point where over 20 percent of high school students now vape. The lingering question is why? What was the role of JUUL, the country's dominant maker of e-cigarettes with almost 80 percent of e-cigarette market share, in the dramatic rise in vaping? The panel assembled today will help us address these questions and frame our discussion for Part II of this hearing here tomorrow at 2 p.m. when JUUL founder, James Monsees, will testify.

Today we will examine what exactly about JUUL's advertising and marketing make it irresistible to kids. Dr. Robert Jackler, the preeminent tobacco advertising scholar in the country, will help us answer that question. After today we hope to understand how JUUL appealed to youth while simultaneously avoiding detection by adults. We will hear about JUUL's efforts to market directly to kids, including how JUUL entered schools under the guise of anti-vaping presentations. Then after all school personnel left the assembly room in a lot of these schools, unfortunately these JUUL presenters told kids that their vaping tools were safe.

We will hear from the parents of kids who sat through one such presentation. Two devoted mothers were so angry that they founded a nationwide advocacy group. I suspect that of all the schools JUUL entered, it regrets going into that one the most because it incited the righteous anger that only comes from parents who feel that their kids were being exploited.

We will also hear that JUUL's targeting of vulnerable populations was not limited to kids. Rae O'Leary will describe JUUL's attempts to test its market on Native Americans. JUUL tried to pay her tribe to give free JUUL starter kits to tribal members. JUUL told the tribe that its product is healthy and proposed pushing it through the tribe's medical professionals. JUUL appeared to think it could get away with this on tribal land, and it tried to ensure no one else found out about it.

The JUUL product itself contains very high nicotine levels, three to six times the amount of the e-cigarettes that came before it. Its formulation eliminated the harsh taste that would have previously accompanied that much nicotine, and further masked it with flavors—flavors—which appeal to youth. Kids do not grasp this. Sixty-three percent of users aged 15 to 24 do not know JUUL contains nicotine. They think that it is only has flavorings and mistakenly believe that the product is not harmful. Dr. Winickoff will help to explain the health impact of youth JUUL use.

Perhaps we can better understand what led to parents sending JUUL letters, like one from June of last year, stating, "My daughter is highly addicted to the nicotine in JUULing. It is very sad and occurred very quickly over the past several months. She is 16 and now has addictive behaviors that she never had before JUULing, such as stealing money and other teens' JUUL's. She also lies and sneaks out at night to get a nicotine fix." Perhaps we can understand why a therapist wrote to JUUL in July of last year disheartened at how many of her teen clients came to her about JUUL addiction, talking about how "desperately they need to vape." She expressed concern about kids using JUUL to "self-medicate from mental health issues, like anxiety and depression."

We will also examine what about the JUUL device makes it so attractive to teens. It is discreet in a way that no cigarettes or prior e-cigarettes were. It puts off a limited cloud of aerosol and its smell doesn't linger. It is small. And before JUUL was a household name, parents could have looked right past it thinking it was a thumb drive. In fact, I have had one in my hand during this entire statement.

JUUL hasn't provided satisfactory answers for these open questions. It is my sincere hope that our hearings today and tomorrow will help us better understand JUUL's role in this terrible epidemic and point us toward solutions to prevent teen vaping addiction.

The chair now recognizes the distinguished ranking member from Texas, Mr. Cloud, for five minutes for an opening statement.

Mr. CLOUD. Thank you, Chairman, and thank you, witnesses, for appearing this morning. For decades now, we have known that smoking is dangerous and linked to cancer. Cigarettes result in approximately 480,000 preventable deaths in America each year. These deaths are only preventable, however, if individuals are able to stop smoking.

For years now, smoking has been on the decline, but we are far from eradicating it. It is clear that the methods for cessation that existed just a few years ago—quitting cold turkey, using nicotine gum or patches—sometimes simply are not enough. Recent studies suggest that electronic cigarettes could be part of a broader tobacco

control strategy and could be considered viable components to cessation.

There is a growing consensus in the scientific community that electronic cigarettes are significantly less harmful than traditional tobacco products. In fact, a study commissioned by the Public Health Service of England found that e-cigarettes were 95 percent less harmful than tobacco cigarettes. And for this reason, some smokers wanting to quit have turned to e-cigarettes as a cessation aide. Though the FDA has yet to determine that e-cigarettes are effective for this purpose, other studies have found the e-cigarette use was associated with nearly twice the rate of successful smoking cessation than other nicotine replacement therapies.

We do need to be clear about one thing. No one wants kids to use tobacco. No one wants kids vaping, and no one wants vaping companies to target children with advertisements. It is illegal for anyone under 18 to purchase and to consume these products. The Tobacco Control Act of 2009 also applies to e-cigarettes. Members of Congress draft and pass legislation that legislation. That process should always begin with strict fidelity to facts and research, and in order to obtain these facts and hear the research, the questions I hope to have answers to today are: what are, if any, the public health benefits to e-cigarettes, can electronic cigarettes be part of an overall tobacco control strategy, and, if so, how do so in a way that ensures that kids are protected, and many more questions that I hope we will hear answers to today.

As Dr. Scott Gottlieb, I believe, said, “Two-thirds of adult smokers have stated they want to quit. They know it is hard, and they probably have tried many times to quit. We must recognize the potential for innovation to lead to less harmful products.” If two-thirds of smokers in this country want to quit, which is a great thing, Members of Congress could be cautious in moving forward with making transitions more difficult than it already is. Like anything else, whether it is use, access to marijuana, or alcohol, the first line of defense is engagement by parents, schools, and local communities to educate children about the risk and ensure healthy lifestyles.

I hope we have a productive discussion today. Thank you very much for being here.

Mr. KRISHNAMOORTHY. Thank you, Mr. Cloud. Now, I would like to turn to our witnesses. First of all, thank you all for joining us today. We very much appreciate you taking time out of your very busy schedules. And thank you to all of you in the audience for coming here on an otherwise slow, fake news day.

[Laughter.]

Mr. KRISHNAMOORTHY. Today we are joined by Ms. Meredith Berkman, who is the co-founder of Parents Against Vaping E-cigarettes. Also, Ms. Rae O’Leary, a member of the Turtle Mountain Band of the Chippewa and a public health analyst and researcher with Missouri Breaks Industries Research in South Dakota. Dr. Jonathan Winickoff, a member of the American Academy of Pediatrics. Dr. Robert Jackler, who is the Sewall Professor and departmental chair at Stanford University Medical School and a practicing surgeon. And finally, Dr. Raymond Niaura of the Depart-

ment of Social and Behavioral Sciences of the College of Global Public Health at New York University.

Thank you all for coming. If you would all please rise and raise your right hand, I will begin by swearing you in.

Do you swear or affirm that the testimony you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

[A chorus ayes.]

Mr. KRISHNAMOORTHY. Thank you. Let the record show that the witnesses answered in the affirmative. Thank you and please be seated.

Without objection, your written statements will be made part of the record. With that, Ms. Berkman, you are now recognized for five minutes. And let me just quickly explain the lighting system here. So you have five minutes, and there is a countdown on the clock. Green means you are in good shape. Unlike with stoplights, yellow means speed up and red mean stop. So with that, please begin, Ms. Berkman.

**STATEMENT OF MEREDITH BERKMAN, CO-FOUNDER,
PARENTS AGAINST VAPING E-CIGARETTES**

Ms. BERKMAN. Not stressful at all. Thank you very much. Good morning, Chairman Krishnamoorthi and Congressman Cloud—thank you for your words—and distinguished members of the House Oversight Committee on Economics and Consumer Policy. I am Meredith Berkman, and I represent Parents Against Vaping E-cigarettes—we call it PAVE—a grassroots group founded over a year ago by three concerned moms. We already have groups of activated parents across the country from California to New York and places in between. We have people with us here today from Texas, from Georgia, from Virginia, New York, New Jersey, et cetera.

My co-founders, Dina Alessi and Dorian Fuhrman, are behind me with members of our families. Between us we have nine kids between the ages of seven to 19. Along with our friend, Mimi Boblich, also here, we created PAVE in response to the JUULing epidemic that, as you said, seemed to come out of nowhere, yet experts consider one of the most serious adolescent public health crises our country has faced for decades.

Our goal today is to give voice to the 3.6 million teens who are vaping, most of them JUULing. This most recent figure from the CDC is already outdated. As you said, between 2017 and 2018, there was a 78 percent rise in the use of these products by high school students and a 48 percent rise in use by middle school students. Experts believe that the new figures due this fall will likely be much higher because nothing has happened to have them go down.

We hear from desperate parents every day who contact us seeking resources, information, and help for their JUUL-dependent, nicotine-addicted kids, but there is not yet any FDA-approved treatment for this kind of teen nicotine addiction. I will share very briefly just one or two stories because they are heartbreaking, and they come from every state represented here on the panel and probably every state of people in this room.

From Massachusetts, our PAVe advocate, Kristin Beauparlant, speaking about her son, Cade, a hockey player, described how he developed a cough and complained he was not able to breathe while skating. He became distant, moody, irritable, and had extreme bouts of anger, a very common thing that people report. “Our home environment was toxic, and it turns that Cade has restrictive lung disease. He needs inhalers and oral steroids. He had smoking a pod a day, the equivalent of more than a pack of cigarettes a day, for years, for three years.”

Kelly Kinard from North Carolina is with her son, Luca, whose addiction was so severe, he spent 39 days as an inpatient at rehab in California. Kelly said, “We began living with a stranger. Our straight A student’s grades dropped to F. It was the extreme anger. It turned out our 14-year-old had a substance abuse problem, and that substance was JUUL.”

Now I want to share a personal story, the story of how JUUL went after our kids and their friends by coming into their school. Without the knowledge of the school or of us concerned parents, JUUL sent a representative to talk to our kids about its product under the guide of education. On April 3, 2017, my then 15-year-old son, Caleb, who is here, told us there had been an anti-addiction talk at school for the 9th grade. The teachers left the room, and the man named Ali gave a confusing talk about JUUL, telling them it was not for kids, but for adults. It was much safer than cigarettes. The FDA would approve it any day.

When Ali was done, Caleb and his friend, Phillip, Dorian’s son, went up to talk to him. Ali repeated that JUUL was for adults, not kids, then he took out this sleek-looking JUUL, showed the boys how it worked, and called it the iPhone of vapes. That’s when we moms decided to fight back. We had discovered a few months before that our kids were JUULing at home right under our noses, which is also very common. It doesn’t mean you’re a bad parent if your kids are JUULing. It is stealth by design.

We knew that nicotine was harmful to our kids’ brains, and as we researched and put pieces together, we learned that JUUL’s deceptive behavior seemed to be part of its marketing strategy. In California, a retired school superintendent was offering schools in his state and in Massachusetts money if they would implement the anti-JUUL curriculum that a man named Bruce Harder was offering on JUUL’s behalf. We came across the Stanford Medical School’s Tobacco Prevention Tool Kit with an odd disclaimer, that we immediately realized was reference to JUUL taking information it shouldn’t have.

None of this is surprising. As I said, JUUL is stealth by design. JUUL says it no longer restocks retail orders of the flavors that research has proven are hooking the kids. Yet just the other day in a 1-block radius in two different stores, I was able to buy these mango pods that JUUL says are no longer on the market, but they are still online.

And that is the problem. If JUUL really wants to slow the youth vaping epidemic and keep younger kids from starting, they will immediately remove all flavors from the market, including menthol and mint, one of the most popular kid flavors, and they will stop spending millions of dollars on lobbyists to oppose sensible legisla-

tion that PAVE's parents and our many coalition partners are fighting for all over this country to restrict youth access to JUUL and other products.

We hope today's hearing motivates Members of Congress on both sides—we all care about kids—to hold JUUL accountable not only for the epidemic, but for its predatory practices and for causing harm to so many kids in this country. It is not a political issue, but a moral one. If we don't take action now, we face an entire generation of kids addicted to nicotine, who are human guinea pigs for the JUUL experiment overall. Thank you.

Mr. KRISHNAMOORTHY. Thank you. Thank you, Ms. Berkman. Now Ms. O'Leary, you are on the clock.

STATEMENT OF RAE O'LEARY

Ms. O'Leary. Good morning, committee members, and thank you for the opportunity to explain JUUL's marketing to minority populations is relevant to this hearing. My name is Rae O'Leary, and I'm serving as a fact witness representing the Cheyenne River Sioux Tribe, which I will refer to CRST.

I am the founder of the Canli Tobacco Coalition, which is a grassroots anti-tobacco coalition on the reservation. The Canli Coalition opposes the use of all commercial tobacco products because of the tobacco industry's historical targeting of American Indians which has contributed to the health disparities and death on the Cheyenne River Reservation.

In January and February 2019, three representatives from JUUL used the historic tactic of the tobacco industry by handing out free product to tribal decisionmakers and offering a switching program to the CRST Health Committee. JUUL proposed that healthcare professionals from the CRST Health Department refer smokers that are 21 years or older to their switching program. Using their referral, American Indian patients would enroll in JUUL's online portal by entering personal data and health behaviors.

JUUL proposed to sell starter kits valued at \$50 to the tribe for \$5 apiece. The tribe would then turn around and provide free JUUL starter kits to patients who enroll in the switching program. Throughout JUUL's presentation, they made multiple claims that their product is effective for smoking cessation and less harmful than tobacco products. These claims as well as JUUL's actions to hand out free product are all clear violations of the Family Smoking Prevention and Tobacco Control Act.

JUUL indicated that their investment in the tribe switching program was worth over \$600,000 to the tribe. Initially, some tribal council members were convinced that JUUL's switching program could help members of the Cheyenne River Sioux Tribe quit smoking, improving their quality of life for smokers, and eventually resulting in fewer healthcare costs to the tribe. Despite initial interest in JUUL's switching program, the CRST Health Committee members wisely requested written documentation of JUUL's switching program proposal.

JUUL did not provide written documentation detailing the program as requested. Instead, they sent a mutual nondisclosure agreement to the tribe's attorney general with untrue information that the nondisclosure agreement had already been discuss by the

CRST Health Committee. The nondisclosure agreement was not signed. As a result, JUUL has not returned to the Cheyenne River Sioux Tribe.

Earlier this month, the CRST Health Committee unanimously approved a resolution that declares “CRST shall neither solicit nor accept any tobacco, electronic smoking device, or nicotine-related funding or sponsorship.” This resolution is currently being considered by the CRST Tribal Council as well as several other sovereign tribal nations and the National Indian Health Board.

The Canli Coalition emphatically opposes the offer JUUL made to the CRST Health Committee for many reasons, including grave safety concerns regarding exploding e-cigarette batteries and nicotine poisoning of children, and unknown, but probable, long-term health risks, such as cardiovascular disease and cancer. Even though the switching program is intended for adult smokers, the Canli Coalition has great concern that our American Indian youth will begin using JUUL due to increased access and a highly concealed and flavorful product. This concern is supported by the data that American Indian middle school students in South Dakota are using e-cigarettes three times more than their white counterparts.

Another concern is that JUUL has not been proven to be safe or effective for smoking cessation. In fact, there is a growing body of evidence that e-cigarette users smoke more and quit less. It is true that some smokers have successfully quit smoking using e-cigarettes like JUUL, but it has also been found that for every 1 adult smoker who quits using an e-cigarette, 81 adolescents will initiate e-cigarette use. Clearly JUUL and other e-cigarettes are being used for more than an alternative to smokers.

The CRST may have looked like an easy target for JUUL because of the FDA’s inability to enforce tobacco regulations or publish reports of our 51 percent adult smoking prevalence, coupled with our genetic propensity to addiction, or maybe they were drawn to the CRST because of our young population base or a recent status as the poorest county in the Nation. JUUL did not provide an acceptable justification for their choice to offer the switching program to sovereign tribal nations. I would challenge the members of the subcommittee to uncover why JUUL is interested in partnering with tribes and exactly how this partnership will improve lives of CRST members as JUUL claims it will.

As an American Indian woman educated in public health and knowledgeable about the tobacco disparities that exist among indigenous populations, I am putting my words on the record that the scenario of the tobacco industry targeting American Indians and exploiting tribal sovereignty has played out for far too long. I put a great deal of thought into my decision to testify at this hearing today. In the end, it was the Lakota Seventh Generation Belief that helped me reach my decision to testify. What happened on CRST and other tribes is simply too important not to be shared. It is time to take action to prevent JUUL and all tobacco companies from preying on at-risk populations.

As you consider possible actions and policy following this hearing, I challenge you to learn from the Lakota people’s Seventh Generation Belief that in every decision, leaders must consider how it

will affect our descendants seven generations into the future. Thank you.

Mr. KRISHNAMOORTHY. Thank you, Ms. O'Leary. Dr. Winickoff, you have five minutes.

**STATEMENT OF JONATHAN WINICKOFF, M.D., M.P.H., M.D.,
M.P.H., MEMBER, AMERICAN ACADEMY OF PEDIATRICS**

Dr. WINICKOFF. Good morning, Chairman Krishnamoorthi, Ranking Member Cloud, members of the subcommittee. My name is Dr. Jonathan Winickoff. I'm a practicing pediatrician at Massachusetts General Hospital, and I have over 20 years of experience caring for children and adolescents. I'm here today representing the American Academy of Pediatrics, a professional medical organization representing over 67,000 pediatricians across the United States.

JUUL use among adolescents has reached epidemic proportions, and I see the impact of this every day in my own practice. Every one of my teenage patients, and even many of my pre-teen patients, either uses e-cigarettes or has friends who use them. Many of my patients have wildly incorrect beliefs about e-cigarettes. They know that cigarettes are dangerous, but believe that JUUL is harmless.

I have to explain that e-cigarettes do not have the same positive health benefits as the fruit flavors that they copy. Rather e-cigarette liquid contains, in addition to nicotine, a number of toxins and carcinogens. E-cigarettes are also not good for growing lungs. They're particularly bad for children with asthma. They can cause serious lung conditions, including hypersensitivity pneumonitis.

The FDA has publicly warned now about increasing reports of seizures in children who use e-cigarettes. My patients are often not aware of JUUL's massive nicotine content and that one JUUL pod contains as much nicotine as 20 cigarettes. They also don't understand that nicotine dependence impacts areas of the brain that control executive function, memory, and mood. Nicotine addiction can take hold in only a few days, especially in the developing adolescent brain that is particularly vulnerable to addiction.

E-cigarette addiction concerns us because use of e-cigarettes can lead to combustible tobacco use. Compared to adolescents who do not use e-cigarettes, those who use e-cigarettes are 3.5 times more likely to begin smoking traditional cigarettes. Many of my patients use JUUL daily and find it impossible to stop. Nicotine withdrawal can cause headaches, insomnia, irritability, anxiety, and depression, yet doctors lack effective tools to help adolescents stop using JUUL. The only surefire way to eliminate e-cigarette use in adolescents is to stop it before it starts. Luckily, we already know what needs to be done. We need to make e-cigarettes less appealing to children, we need to make them harder for children to access, and we need to make them regulated appropriately by the FDA.

First and foremost, we must discuss JUUL's flavors. JUUL pods come in a number of sweet flavors, including mint, mango, and creme. Youth surveys show that e-cigarette flavors are one of the primary reasons teens try e-cigarettes, yet flavors also help mask the harsh taste of nicotine, making repeated use more likely an increasing addiction. JUUL has chosen to keep mint and menthol flavored pods available for sale everywhere. It is completely false to

suggest that mint is not attractive to children. From candy canes to toothpaste, children are introduced to mint from a young age. In tobacco products, menthol's anesthetic properties cool the throat and make it easier for children to inhale the poison.

When JUUL removed some of its other flavors from stores, I saw the majority of my JUUL-using patients switch to mint. Nevertheless, children are still gaining access to other flavored JUUL pods, even though they are now sold online. If the products are available for sale somewhere, children will get their hands on them. We must eliminate child-friendly flavors from all tobacco products. We urge Congress to pass legislation immediately to prohibit flavors, including mint and menthol, from tobacco products.

Mr. Chairman, members of the subcommittee, JUUL is a fatally flawed product. A recent study showed that 15-to 17-year-olds are 16 times more likely to report JUUL use than 25-to 34-year-olds, even though JUUL claims its product are only intended for adults. When so much of the product ends up in the hands of children, it is time we declare it a failed product.

The American Academy of Pediatrics believe that JUUL is a public health threat that must be removed from the market as soon as possible. JUUL and products like it are eroding the progress we've made in reducing teen tobacco use. Teenagers today are using e-cigarettes when many of them would otherwise never have used a tobacco product. JUUL must be held to account for the epidemic it has created, and Congress and the Administration take action to end it. Thank you.

Mr. KRISHNAMOORTHY. Thank you, Dr. Winickoff. Dr. Jackler, you have five minutes.

**STATEMENT OF ROBERT JACKLER, M.D., PROFESSOR,
STANFORD UNIVERSITY**

Dr. JACKLER. Chairman Krishnamoorthi and Ranking Member Cloud, thank you for the opportunity to testify before your subcommittee today.

Almost all smoking begins during adolescence. It is part of teen rebellion, typically commencing between the ages of 12 and 19. It would indeed be a very rare 40-year-old who woke up and said, hey, I think I'll start smoking today. Once a teen becomes hooked on nicotine, it is exceedingly difficult to quit. Many are stuck with a lifelong addiction. From the beginning, JUUL professed a noble mission of improving the lives of a billion smokers. Instead they have spurred an epidemic of nicotine addiction amongst youth. So how did JUUL stray so far from its stated mission?

As a majority of smokers in America are ages 30 to 60, JUUL should have designed their advertising to connect to a middle-age audience. Over the first year—could we have the slides, please, Garrett? Okay. Over the first year after JUUL launched in June 2015, it held at least a series of 50 highly stylized parties with youth-oriented entertainment in cities across America. Thousands of young people were given free JUULs, often by attractive young girls. JUUL's initial campaign called, Vaporized, was designed by an advertising agency whose goal was to create a cult-like following, and they succeeded beyond their wildest dreams. Vaporized featured models in their 20's in trendy-appearing poses and exhib-

iting behaviors more typical of underage teens than mature adults. The tobacco advertisers have long known that these imageries are exactly how to target underage kids.

Just last week in a televised documentary on CNBC, JUUL co-founder, Adam Bowen, claimed that the 2015 Vaporized campaign only lasted less than six months, it was lifestyle oriented, and “had no impact upon sales.” Lifestyle oriented? It was obviously, if we could see the images, it is obviously youth oriented in that way.

Now, contradicting Mr. Bowen, JUUL’s co-founder, James Monsees, a mere seven months after JUUL launched, bragged, “Now we’re actually the fastest-growing e-cigarette company in the world.” So today they say their early advertising, which was patently youth oriented, made no difference. But, in fact, at the time, they were bragging they were the most rapid growing in the world. This is either revisionist history or intentional deception. I’ll let you be the judge.

From its inception, JUUL mostly advertised on social media, especially Instagram, which skews heavily toward youth. JUUL paid influencers, who are social media stars with a large number of online followers, to praise JUUL. JUUL multiplied its reach by the use of hashtags, which became online gathering places for teenagers. Under intense regulatory pressure, JUUL halted its own social media postings in November 2018. However, this was a hollow gesture. It didn’t matter much, and the reason was that viral peer-to-peer promotion amongst teens assured a massive visibility of their products on an ongoing basis.

For example, after JUUL quit its own postings last November, community posts and #JUUL by kids surged, tripled. Now there are 540,000 posts and millions of views of that youthful material. JUUL leadership claims, “We were completely surprised by the youth usage of the product.” Co-founder James Monsees brags, “We are the most educated company, the most diligent, the most well-researched.” They are indeed a data-driven company. They know their market, to whom their products are distributed, and the identity of their customers. The New York Times interviewed a former JUUL manager who disclosed that JUUL knew that their products were becoming popular amongst underage users within the first months on the market.

So JUUL professes to be a technology which disrupts big tobacco. Like many tech startups, as the money starts rolling in, JUUL made many compromises to their grand vision. What should have become an offramp for adult smokers instead has become a heavily traveled onramp to nicotine addiction amongst teens, many of whom graduate to traditional combustible cigarettes. From a policy point of view, the best way to eliminate adult smoking is to keep teens from starting in the first place. So JUUL’s recent partnership with Altria combines the leading youth initiation cigarette, Marlboro, with a leading youth initiation e-cigarette, JUUL. Their agreement specifies joint JUUL/Marlboro marketing is of great concern. So JUUL has been unmasked for its hypocrisy.

Rather than obsoleting big tobacco, JUUL is very much part of it. It is as though they lit the kindling, stood by making no effort to contain the resulting fire, even stoked it, and when the fire department came, expressed shock and dismay about the resulting

major conflagration, while loudly protesting that their actions had absolutely nothing to do with it. Thank you.

Mr. KRISHNAMOORTHY. Thank you, Dr. Jackler. Dr. Niaura, you are on the clock.

STATEMENT OF RAYMOND NIAURA, PH.D., PROFESSOR, COLLEGE OF GLOBAL PUBLIC HEALTH, NEW YORK UNIVERSITY

Mr. NIAURA. Thank you. Mr. Chairman and members of the committee. Thank you for holding this important hearing on a topic of great concern to the Nation's public health. I'm privileged to appear before you this morning to testify about the challenges we face regarding youth use of e-cigarettes and other tobacco products.

My name is Dr. Ray Niaura. I'm a clinical psychologist, professor of social and behavioral sciences and epidemiology at the College of Global Public Health at New York University, and I have spent my entire professional career engaged in research on understanding and treating tobacco dependence and finding and testing ways to help smokers quit smoking.

As a public health and tobacco use scientist, I, too, share concerns about youth tobacco use, including vaping. For the record, I believe no youth should be using any tobacco or nicotine-containing product or any drug for that matter. We should do all we can to discourage youth use by providing appropriate education and counseling, and by making it difficult to purchase such products. I also believe that companies that manufacture and sell vaping products should do all they can to make sure that products are marketed only to adult smokers. I take some comfort in the fact that marketing strategies and health claims will eventually be subject to the U.S. Food and Drug Administration review and approval.

During the fall of 2018, the FDA and the U.S. Centers for Disease Control and Prevention expressed acute concern about youth vaping when they looked at data from national surveys, and this prompted Dr. Scott Gottlieb, who was the FDA commissioner at the time, to declare that youth vaping is an epidemic. This concern was reinforced by data coming from the National Youth Tobacco Survey in 2018.

When the data were eventually released to the public, we looked at it ourselves, and we indeed confirmed that past 30-day vaping had increased from the prior year. And while an increase in uses are of concern, our analysis showed that most adolescent vaping was occasional, and that most regular use was concentrated in adolescents who had already been smokers. I think this is an important point. Yes, we need to be concerned about vaping, but we also need to be concerned about use of other tobacco products. We also looked at youth who had never used tobacco products, and thankfully vaping rates were quite low. Again, this is not to minimize the importance of concern about youth vaping.

Cigarette smoking remains a major concern here in the United States of America, and I would like to also emphasize another point, which is that e-cigarettes have the potential to help adult smokers stop smoking, and we've seen evidence accumulating showing that adult smokers who use e-cigarettes can quit smoking. Regular cigarette studies have come out, for example, in the *New England Journal of Medicine*, indicating the same. Just last week, a survey re-

ported that smokers who switched to e-cigarettes and used them every day were significantly more likely to quit smoking compared to those who did not use e-cigarettes.

These results are important because we know that despite their effectiveness, smokers don't often use quitting methods, such as nicotine replacement therapy or other medications. So as they stand now, e-cigarettes are a consumer product that is proving to be very popular with smokers, and helping them to actually quit smoking cigarettes. Quitting smoking is the number one health priority for cigarette smokers, and we need to use all the tools available to help reduce this burden, which prematurely claims the lives of over half a million Americans every year. So currently about 38 million adults in the U.S. smoke cigarettes, and clearly this is and ought to be a huge public health priority.

I would like to close by saying I think that this set of issues, both youth tobacco and nicotine use and adult smoking have been portrayed as at odds with one another, and they really should not be. We in the public health community and Congress ought to find ways where we can do both. I think we're smart enough to figure out how, but I don't think we have all the answers yet. Thank you very much.

Mr. KRISHNAMOORTHI. Thank you, Dr. Niaura. I now recognize myself for five minutes of questioning.

First of all, Mrs. Berkman and Mrs. Fuhrman, after you discovered that a presenter representing JUUL gave a closed assembly at your children's school, you researched the issue and formed an advocacy group to inform parents around the country about the dangers of adolescent e-cigarette use. Thank you for your continued advocacy. As a parent of three young children myself, including a teenager, I was shocked to hear JUUL had access to children without the presence of teachers or administrators, and without parental permission. JUUL continues to partner with youth organizations across the country, so it is important to understand what outreach looks like on their part.

Mrs. Berkman and Mrs. Fuhrman, I would like to ask a couple questions of your sons, if that is okay.

Ms. BERKMAN. Yes.

Mr. KRISHNAMOORTHI. Phillip and Caleb, can you please come to the table for a couple minutes? I would like to first address Caleb. Caleb, what grades were you and Phillip in the year of the JUUL presentation?

Mr. BERKMAN. Ninth grade.

Mr. KRISHNAMOORTHI. Can you just speak directly into the microphone?

Mr. BERKMAN. Ninth grade.

Mr. KRISHNAMOORTHI. Thank you. What were students told about the presentation before it began?

Mr. BERKMAN. We were told that we were having a mental health/addiction seminar that we have three times a year, and the teachers are told the room so it is a safe space for kids to talk.

Mr. KRISHNAMOORTHI. Did most of your classmates believe JUUL was safe prior to the presentation?

Mr. BERKMAN. I think many kids were already JUULing and had their doubts to if it was safe, but I think a lot of kids still thought it was possibly dangerous.

Mr. KRISHNAMOORTHY. Did the presenter ever mention his connection to JUUL, and were your teachers in the room when he spoke?

Mr. BERKMAN. He did mention his connection to JUUL, and my teachers were not in the room when he spoke.

Mr. KRISHNAMOORTHY. Did the presenter ever say that JUUL was safe?

Mr. BERKMAN. Yes.

Mr. KRISHNAMOORTHY. Did the presenter call JUUL “totally safe” more than once?

Mr. BERKMAN. Yes.

Mr. KRISHNAMOORTHY. What impact did those “totally safe” comments have on your classmates, some of whom may have already started vaping?

Mr. BERKMAN. For my classmates who were already vaping, it was a sigh of relief because now they were able to vape without any concern.

Mr. KRISHNAMOORTHY. Were there kids who had never been JUULing that were more likely to try after hearing it was “totally safe?”

Mr. BERKMAN. I can’t say for sure, but I believe that after this meeting, kids were more inclined to vape because now they thought it was just a flavor device that didn’t have any harmful substances in it.

Mr. KRISHNAMOORTHY. You and Phillip approached the presenter when the assembly concluded. What motivated you to even approach him in the first place?

Mr. BERKMAN. I believed the presenter was sending mixed messages by saying JUUL is totally safe and following up every “totally safe” statement with “but we don’t want you as customers.” I saw a mixed message being sent, and I believed that the presenter was playing on the rebellious side of teens where when teens are told not to do something, they are more likely to do it.

Mr. KRISHNAMOORTHY. Phillip, let me ask you a couple of questions. What was your experience speaking to the presenter?

Mr. FUHRMAN. So we went up and talked to him, and Caleb asked a question about what can you do if your friend is addicted to nicotine.

Mr. KRISHNAMOORTHY. Phillip, were you addicted to JUUL at the time of this presentation.

Mr. FUHRMAN. I was.

Mr. KRISHNAMOORTHY. And when Caleb asked the presenter what he should do if he had a friend that was addicted to nicotine, was Caleb referring to you?

Mr. FUHRMAN. He was.

Mr. KRISHNAMOORTHY. How did the presenter answer Caleb’s question of how he could help his nicotine-addicted friend, namely you?

Mr. FUHRMAN. Since Caleb was not specific on what kind of nicotine he was addicted to, whether it was an e-cigarette or cigarettes, the speaker thought that he was talking about cigarettes. And he

said that he should mention JUUL to his friend because that is a safer alternative than smoking cigarettes, and it would be better for the kid to use.

Mr. KRISHNAMOORTHY. So let me get this straight. He wanted you to switch from a combustible cigarette to JUUL.

Mr. FUHRMAN. Yes.

Mr. KRISHNAMOORTHY. Did the presenter demonstrate the product to you?

Mr. FUHRMAN. He didn't use it, but he did take it out and show it to us.

Mr. KRISHNAMOORTHY. Okay. This is very disturbing behavior to say the least. A person connected to JUUL pulled out a JUUL device to demonstrate its safety to teenagers, and then lied about the product being "totally safe." Did he say anything else about whether the government had approved JUUL?

Mr. FUHRMAN. He mentioned that the FDA was about to come out and say that JUUL was 99 percent safer than cigarettes, and he said that that would happen very soon, and that it was in FDA approval while the talk was going on.

Mr. KRISHNAMOORTHY. Thank you, Caleb and Phillip. Let me ask Dorian, Phillip's mother, to say a couple words here. Dorian, thank you for coming today.

Ms. FUHRMAN. Hi. Thank you.

Mr. KRISHNAMOORTHY. Your son, Phillip, just stated he was addicted to JUUL.

Ms. FUHRMAN. Yes.

Mr. KRISHNAMOORTHY. How did his addiction impact your family?

Ms. FUHRMAN. It was difficult, and at first we didn't understand what was going on. As a young 14-year-old, he was interested in so many different things from surfing to cooking to his little sister. And I started to find these flash drives and these green plastic caps in his pockets, and I didn't really know what it was at first. So he kept saying, you know, they belonged to a friend, and we would have fights about it.

I figured out what it was because I Googled the name on the side, and it was difficult. He changed kind of overnight. He started spending a lot of time in his room in the dark. He became moody. We had a very contentious relationship. I became very suspicious obviously. I think he didn't really understand what was going on himself, and neither did we.

Mr. KRISHNAMOORTHY. Thank you, Dorian.

Ms. FUHRMAN. Thank you.

Mr. KRISHNAMOORTHY. Let me now recognize Ranking Member Cloud for five minutes of questioning.

Mr. CLOUD. Thank you, Chairman. Ms. Berkman, I am curious at the reaction. I assume you approached the school board, the principal? Was the reaction?

Ms. BERKMAN. The school had no idea that the outside group had brought a JUUL representative into the school. The school had no idea.

Mr. CLOUD. So the school had hired a group that had—

Ms. BERKMAN. Yes, and we believe that the outside group was naive definitely, but in good faith, because when I called to ask about this presentation, the staffer who answered the phone said,

oh, you found the right person. I was researching anti-JUUL education online, and I came across the name of a woman named Julie Henderson, who was listed then, no longer, on the JUUL website as its youth prevention coordinator. Then she called, and this woman, Ms. Henderson, said I have the perfect person and sent Ali.

Mr. CLOUD. Okay. Thank you. Dr. Niaura. Did I pronounce that right?

Mr. NIAURA. Yes.

Mr. CLOUD. Okay. Could you explain the difference from a health perspective, I guess, between a traditional cigarette and an e-cigarette? Is there one?

Mr. NIAURA. Yes, there are many differences. You know, traditional cigarettes consist of a preparation of tobacco leaves, which when burned create, you know, smoke and contains roughly 7,000 different chemicals, most of which are not good for the human body. E-cigarettes contain far fewer ingredients in addition to nicotine, usually something like propylene glycol glycerol which are, you know, commonly found ingredients, for example, in food stuffs, and some flavorings.

This, in general, just the difference in terms of the number of compounds in e-cigarettes make the e-cigarettes in general safer, although they probably can vary from product to product. A lot of the safety of e-cigarettes depends on temperature controls, so, for examples, if products have adequate temperature control, they tend to be, you know, less toxic.

Mr. CLOUD. Okay. I guess we have known cigarettes for a while cause cancer, and talking about prevention, I remember in 3d grade seeing lungs sitting in a jar of somebody who had passed away from cigarette use. But I guess what I am trying to do get down to is what are the health effects of the combustible side of it and what is the health effects of the nicotine side?

Mr. NIAURA. Well, yes, and that is actually an important, you know, point to raise. So if we look at nicotine in and of itself, it is not risk free, but it is probably a lot less toxic compared to the other chemicals that come out of cigarette smoke. So, for example, nicotine probably does not cause cancer. It may have some small effects on existing cardiovascular disease and so forth. You know, the brain might have to adapt to, you know, having a drug on board. These are neural adaptations which are true for any drug. But the nicotine itself is not the culprit when it comes to things like, you know, cancers, at least as far as we know.

Mr. CLOUD. We seem to have a kind of a competing set of facts here. We have data that shows that teen e-cigarette use has gone up a lot, and then Dr. Niaura, you mentioned that a lot of that is, I guess, transitional or is it not? Is it new use? I guess, Dr. Jackler and Dr. Niaura, if you can kind of clarify that a little bit for us to have a better understanding of what is new use, what is transitional use.

Mr. NIAURA. Yes, that is an important question that I don't think we have a good handle on yet because a lot of the surveys that we look at are what are called cross-sectional, meaning it is a dipstick or a slice in time. You know, we see kids that report to us, oh, they are using one or two days or, you know, every day and so forth.

What we need are studies that track kids over time to actually see whether the ones who are starting out, you know, one or two days go on to use more.

But, you know, once again, we don't know what the real implications are of these different patterns of use, and, you know, I would want to emphasize and share the concern that, you know, kids shouldn't be trying these products, and they shouldn't be using them. Certainly shouldn't be using them on a frequent basis.

Dr. JACKLER. The CDC data show a huge use, over 2 million American high school students and many hundreds of thousands of middle school students. A fraction of them, of course, experiment and others become regular users. I just want to touch as a physician on the healthfulness of vaping. You know, if you start smoking today, it is 20, 30, 40 years before you get emphysema or lung cancer. Nobody knows what it does to the human lung to breathe in and out aerosolized propylene glycol and glycerin over and over. It is an experiment frankly. We will find out years from now the results.

The flavoring industry knows that the compounds that we put into our food that are safe in your intestinal tract, when you breathe them in, so, for example, the classic example is buttered popcorn, microwave butter popcorn. The diacetyl compounds in the industrial setting cause severe restrictive lung disease on the part of the industrial workers. The e-cigarette industry has taken flavored chemicals, thousands of different ones—cotton candy and cookie flavors—mixed them with propylene glycol, and then they are exposed over and over into the lungs. We just don't know yet the long-term results.

There is no doubt in my mind that vaping is safer than conventional smoking, but that doesn't mean that it is safe.

Mr. CLOUD. Thank you.

Mr. KRISHNAMOORTHY. Thank you, Mr. Cloud. I now recognize Congresswoman Tlaib for five minutes of questioning. Congresswoman?

Ms. TLAIB. Thank you so much, Mr. Chairman. I want to thank all of the witnesses for being here. And, Ms. Berkman, as a mother, I can sense your frustration. I just want you to know being here just a short seven months and kind of hearing, you know, some people call it rhetoric to kind of discredit a lot of the things that we are pushing forward. I just want you to know you have the truth on your side. And just be stronger for that because we don't need more studies. We already know the truth here.

In the few years after JUUL was founded in 2015, it dominated the market through a targeted advertising campaign that seems to be a winning strategy as JUUL now accounts for 76 percent of the U.S. e-cigarette market, which is simply staggering. What I find troubling is that in the same timeframe, the rate of teen nicotine addictions skyrocketed. The CDC found a 75 percent increase in e-cigarette use among high school students from 2017 to 2018. So it is no coincidence to me that teens who use e-cigarettes almost exclusively refer to the activity as JUULing.

So, Professor Jackler, you have studied JUUL's marketing practices since the company started in 2015. Based on your expertise,

should JUUL have been aware its marketing campaign would appeal to youth and teens?

Dr. JACKLER. Absolutely. You know, huge teenage fads don't happen by accident, you know. The Beatles and beanie babies were products of very clever promotional activities, and so is JUUL. Now, JUUL engaged ad agencies, which are professionals, and ad agencies understand very well the difference between marketing to baby boomers, like newspapers, radio, broadcast TV, and Gen Zers, who will sit all day long on their phones looking at social media.

Now ad agencies follow the instructions of their clients. They don't work independently. Certainly the company knew very well when it chose to use Instagram who the heaviest users of Instagram were. It is the underage youth by and large, and the "Insider Report" from the New York Times validates it. So I think there is any question that JUUL knew that its actions were perpetuating the youth epidemic that happened within JUUL.

Ms. TLAIB. You are a professor at Stanford, the same university that the founders of JUUL attended as students. Have you ever met James Monsees or Adam Bowen?

Dr. JACKLER. Yes, James Monsees. And my research team, we went up JUUL last summer in August. You know, he was quite interesting. He thanked us for the data base that we have of 50,000 traditional tobacco ads online. He said they were helpful as they designed JUUL's advertising, and this struck us so much that as the seven of us left the two-hour meeting was the very first thing we talked about, how surprising it was that he indicated the JUUL was grounded in traditional advertising.

In fact, we know very well, having studied tobacco advertising, that JUUL's marketing faithfully recapitulates the methods used by the tobacco industry to target young people. That includes brands such as Marlboro, which they closely emulated, American Spirit, Newport. There are direct derivatives' advertising in those.

Ms. TLAIB. Thank you. So JUUL's mission statement asserts that it aims to "improve the lives of the world's 1 billion adult smokers." Do JUUL's marketing practices, which you have studied for years, align with that stated mission?

Dr. JACKLER. Well, not for its first three-and-a-half years. On the fourth year, at that point when already the youth fad was raging, their ads became more calibrated to an adult audience, and the channels that they used it as well. They have now switched campaigns depicting middle-age and older adults. It is in printed newspaper and on television, and no longer they are promoting on social media.

Now, this only happened long after there was a youth epidemic, and it was because of the unwanted and intense attention by regulators. Also interestingly, as Mr. Monsees pointed out when we visited with him, they were concerned about their investors, particularly national companies, like Fidelity, who was an investor, who certainly didn't want to be associated with products that were widely seen—

Ms. TLAIB. No, it always leads to profits. So last November, JUUL deleted its Instagram and Facebook, as you accounted to, but the explosion of their marketing had already had an impact on

youth. How do we continue to see initial marketing campaigns' influence on kids on social media today?

Dr. JACKLER. Yes. So JUUL taking off its own marketing didn't stop all of the JUUL-branded hashtags, and there are dozens of them. #JUUL alone in the first three years and five months, June 2015 to November 2018, there are about a quarter of a million posts, mostly by young people on #JUUL. Since last November to now, it doubled to over half a million.

Ms. TLAIB. And, Professor, yes, I really do appreciate that. But, Chairman, it is important to note what astounded me the most is they deleted Facebook and Instagram, but JUUL's Twitter followers, half of them are under the age of 18.

Dr. JACKLER. Yes, and if I might say, just because you delete them, doesn't mean it never happened.

Ms. TLAIB. No. Thank you so much.

Mr. KRISHNAMOORTHY. Thank you, Congresswoman. Next, Mr. Comer, you are recognized for five minutes.

Mr. COMER. Thank you, Mr. Chairman. The topic of the committee hearing today is youth's use of electronic cigarettes, and it has been mentioned today the potential possible correlation with tobacco and cigarettes. Dr. Niaura, you conducted a lot of research and published several studies on this very topic. How reliable of a predictor of future use of tobacco products is current use of vaping for youth?

Mr. NIAURA. Well, there is a statistical association between, you know, use of e-cigarettes and subsequent cigarette smoking. But what we looked at, and we looked at this in the Population Assessment of Tobacco and Health Study, which is funded and sponsored by the FDA and the NIH. So we did find that, but then we also found that if kids had, in fact, started with a cigarette, they were 20 times more likely to continue smoking a cigarette.

So the message that we take from this is that, you know, use of all or any nicotine or tobacco containing products for kids probably will increase the risk for subsequent cigarette smoking. The worst thing to start with would be with a combustible product like a cigarette.

Mr. COMER. Has the rate of decline in smoking among adults and youth decreased or increased since 2010 when e-cigarettes started to rise in popularity?

Mr. NIAURA. Well, we have seen steady declines in, you know, cigarette smoking, both in youth and adult populations, which we should, you know, take as good news.

Mr. COMER. Absolutely.

Mr. NIAURA. We certainly have more work to do.

Mr. COMER. Right.

Mr. NIAURA. Yes, there is, you know, sort of a diverging of the trends with e-cigarettes picking up and use of cigarettes going down. That is the area of active research - to see whether those two things are actually connected with one another.

Mr. COMER. Mm-hmm. If e-cigarettes were a gateway to smoking, wouldn't evidence show a substantial increase in smoking among youth and young adults by now?

Mr. NIAURA. Well, again, we have seen, you know, a decrease in use of other tobacco products, cigarettes, in particular, in youth. So

right now at least it doesn't appear that e-cigarettes are translating into subsequent use of cigarettes, at least as far as we can tell right now.

Mr. COMER. Does evidence show that teens are diverting to e-cigarettes instead of taking up smoking?

Mr. NIAURA. Well, that is an important question that I think we need more research to address. Kids are trying a lot of different products, you know, including vaping. We need to understand more about who are the high-risk kids who, you know, might try a lot of products, who may inadvertently become, you know, more addicted to nicotine. We really need more and better understanding of those factors so that I think we can do a better job at, you know, doing some kind of intervention.

Mr. COMER. Mm-hmm. Well, I just want to make a point here that I am certainly opposed to youth vaping. I am opposed to youth smoking. I am not a smoker, never have been, but I am a farmer, and I do represent probably the biggest tobacco-growing district in America. Without a doubt this is something that has been a big economic boom to Kentucky. Having said that, we recognize the risks and the danger and the bad effects of cigarette use and tobacco use.

The industry, I think, has tried to do things to curb underage smoking. I know that Senator McConnell has a bill that I support to raise the minimum age to purchase cigarettes, and I think that that is something that needed to be mentioned today, that, you know, tobacco is still legal. I know this is about e-cigarettes, but I have to conclude with this because it is a big industry in my district. You know, in Kentucky, you are not able to grow fruits and vegetables because of the climate, so you are limited as to what types of crops you can grow.

It is still a legal industry, and as long as it is still a legal industry, I would rather the tobacco be grown in Kentucky by middle class farmers, small farmers, which is who grow tobacco, than importing tobacco from other countries. But having said that, I certainly want to work with my colleagues on both sides of the aisle to make sure that youth use of e-cigarettes goes down, and certainly as I have always been a proponent of doing everything we can to prevent underage smoking. With that, Mr. Chairman, I yield back.

Mr. KRISHNAMOORTHY. Thank you, Mr. Comer. Congresswoman Pressley, you have five minutes.

Ms. PRESSLEY. Thank you, Thank you, Mr. Chairman, and thanks to all of our witnesses for sharing your expertise and sounding the alarm on this. In addition to the experts and those that are at the dais here, I did want to just acknowledge and recognize representatives of the African-American Tobacco Control Leadership Council who are also in the room with us today, and we thank you for your good work.

The growing youth vaping epidemic has taken the Commonwealth, which I represent, by storm. Across the state, it is estimated that nearly one in five high schoolers and one in 20 middle school age kids are using these products. Student advocates report school bathrooms have turned into JUUL lounges that smell fruity and minty. I have spent the last 10 years of my life as an elected

official advocating for a school nurse in every school, and we have learned from our school nurses that 80 percent of high school students are vaping. That is from their youth risk behavior surveys.

Leaders at the local and state level in Massachusetts, from our city council to our attorney general, who was the one to initiate at the first investigation into JUUL's problematic marketing and sales practices, and our Boston City Council is looking to push for a hearing on banning flavored vaping products. But we have to act on the Federal level.

So I would be remiss not to highlight how similar many of JUUL's tactics seem to be right out of the big tobacco playbook. For decades, big tobacco targeted black communities to the point where almost 90 percent of all black smokers use menthols. Nearly 45 percent of black menthol smokers state they would quit smoking if menthols were all together banned. So it is extremely disturbing. We have been here before. We don't need a bunch of studies. The only studies we need are the millions of casualties that are behind us and that we run the risk of seeing ahead of us. So this is very disturbing.

The flavor crisis is even worse for children, 66 percent of whom the National Institute on Drug Abuse found believed e-cigarettes only contained flavors, as we learned from the youth who spoke today, and we thank you for telling your story. It seems obvious that the elimination of flavors would help eliminate this confusion.

So, Dr. Winickoff, why are menthol-flavored tobacco products particularly exploitive in the context of e-cigarettes?

Dr. WINICKOFF. Well, thanks for the question. The tobacco industry has a long history of targeting mint-and menthol-flavored tobacco products to African-Americans, and specifically African-American children. A recent study in the American Journal of Preventive Medicine, however, showed that the majority of Americans believe that mint and menthol should be banned as a flavor in tobacco products.

Now interestingly, and contrary to what the tobacco industry and the tobacco product industry claims, if you just look at the opinions of blacks and African-Americans, an even greater majority believed it should be banned. So I think no one is fooling anybody here.

Ms. PRESSLEY. Agreed. And aside from potentially preying upon the black community, JUUL's marketing playbook, as we learned from Ms. O'Leary, has targeted children in native populations. Ms. Berkman, you were so disturbed by JUUL's practices that you created an organization to spread awareness of JUUL's dangers to families across the country. You know that expression, "Hell hath no fury like a woman?"

Ms. BERKMAN. Yes.

Ms. PRESSLEY. They need to make up one about moms, okay, because that is next level. And so, you know, we thank you for your fierceness and your advocacy.

Ms. BERKMAN. Thank you.

Ms. PRESSLEY. What have parents told you about how JUUL's marketing influenced their children's use of the product?

Ms. BERKMAN. Well, I wish we had those slides because I hope everyone will get to see them. When you see the sexy young influencers that were giving this product away, when you see how

similar the old tobacco ads, they are almost identical, so JUUL knew what it was doing. What we tell parents is, you know, you are not a bad parent because unfortunately, as you said, the old “everyone is doing it.”

The scary thing is in this case, it is true. It is stealth by design. As you said, we are very upset. These are kids who would otherwise not have been initiated into tobacco use. We are talking about kids, known harm to kids versus potential benefit for adults. I hope there is a potential benefit for adults in general, but known harm to kids who can’t make those decisions for themselves because they are being deceived through the use of social media. That is a problem.

Ms. PRESSLEY. Thank you. I want to pick up on the deception and how that affects adults. Ms. O’Leary, did JUUL make any claims to Cheyenne River Sioux Tribe about its product helping people quit smoking? Did they claim that these products were healthy?

Ms. O’Leary. Yes, you can see in slide 21 from my attachment that it states, “Have smokers that can’t quit? JUUL has created a program where you can help them switch with minimal cost to you.” So using words like “quit,” “switch,” cessation is implied, and that was the impression of the tribal council members who were on the other end of this presentation. I think that the other claim that was made was the harm reduction. In slide 6 of their presentation, they state “Elimination of combustible cigarettes is crucial to reduce the risk of harm,” and on slide 12, “Vaping is a fraction of the risk of smoking, at least 95 percent less harmful.” But I want to point out that in that study that found that that this was done with not JUUL, but other e-cigarettes, that had much less nicotine content.

Ms. PRESSLEY. I can’t tell the clock. Do I still have time here? Am I at time or do I still have time?

Mr. KRISHNAMOORTHY. You are out of time.

Ms. PRESSLEY. Okay. All right. Thank you, Mr. Chairman. Hopefully I will a second—

Mr. KRISHNAMOORTHY. Thank you, Congresswoman. Congresswoman Miller, you have five minutes.

Mrs. MILLER. Okay. Thank you, Mr. Chairman, and thank you all for being here today. My home state of West Virginia ranks among the top states in the Nation for the highest percentage of adult smokers, about 26 percent of our population. Thirty-eight million people in the United States smoke. I agree that we need to ensure that we keep nicotine products like e-cigarettes out of the hands of youth, but we must also ensure that we do not overregulate this industry to the point that they are no longer available for those people of legal age who would like to use them either recreationally or as a means to quit smoking.

When I was a child, one of my chores was to empty the trash every day. Both of my parents were smokers. That was really icky. I will tell you, if anything would keep you from smoking, it would be emptying ashtrays every single day. And I believe it was in 1963 when the surgeon general came out and said that cigarette smoking caused cancer, and both my parents quit. My father just plain old quit cold turkey. My mother smoked three quarters of a ciga-

rette, then half of a cigarette, then a quarter of a cigarette. She did it very slowly. But that ashtray thing is what really kept me from ever wanting to smoke, and coming into a house that smelled like smoke. It was really nasty.

Dr. Niaura, in your research, do you find that most used to vapor also utilize other nicotine or tobacco products as well?

Mr. NIAURA. Yes. As I indicated in my testimony, close to three-quarters of kids, at least based on the most recent survey data that we have, have also, you know, tried or are using, you know, other tobacco products.

Mrs. MILLER. Is the use of e-cigarettes by youth correlated to them smoking cigarettes later in life?

Mr. NIAURA. Well, that is that is the million-dollar question that we are all concerned about and trying to figure out. At least, as I mentioned, you know, there is some statistical correlation. I don't know if we can say that one causes the other. That is a pretty high bar to prove scientifically. But, you know, nonetheless, you know, I maintain my position, and I am in amendment with everyone, you know, kids should just not be using any tobacco or nicotine-containing products.

Mrs. MILLER. I know when I went to college, the girls all had little cigarette cases and little things that they always carried, and oftentimes I felt like is it more of a crutch because you wanted to do something with your hands, or was it because it really was addicting. Often younger people, you know, they want to carry keys or they just want to have something to do with their hands, and that is more of an observation than a question.

In your testimony, you talk about protecting youth from accessing nicotine products and giving smokers a useful tool to quit smoking, and it shouldn't be a tradeoff, and that we can do both of these things at the same time. Could you elaborate on suggestions on how you think we could accomplish both of these goals?

Mr. NIAURA. Well, I wish I had all the answers, but I am I am hoping, you know, that the FDA with, you know, the power of the Tobacco Control Act, can work hard, and I know they are working hard, to figure out how to achieve, you know, both goals, which is to minimize, if not eliminate, youth use and maximize the ability of adult smokers to access, you know, safe and effective products. I think we are still in the early stages of figuring out, you know, which e-cigarette type products are going to prove to be the most useful. But, you know, that is what the FDA is there for, you know, to review applications and use their scientific powers to determine which products are, in fact, fit for approval.

Mrs. MILLER. In regard to adult smokers, how can the health risks associated with cigarettes be mitigated by the use of e-cigarettes?

Mr. NIAURA. Well, the major thing is if cigarette smokers can switch completely to an e-cigarette product, we know that that, in fact, will result in pretty quick changes in biological markers of harm that are normally associated with smoking cigarettes. So in other words, we have signals that their bodies are actually kind of getting better and improving. But Dr. Jackler is right in saying that we need more information about long-term effects of use of these products, and so that is an area of active research. But at

least in the short term, it looks like, you know, if people switch to these products, they actually are in some ways improving their health.

Mrs. MILLER. You mean like coughing?

Mr. NIAURA. More like, you know, biological markers that are associated with higher risk of cancer, so blood levels of certain chemicals, things like that.

Mrs. MILLER. Okay. Thank you, Mr. Chairman.

Mr. KRISHNAMOORTHY. Thank you, Congresswoman. Now Mr. DeSaulnier for five minutes.

Mr. DESAULNIER. Thank you, Mr. Chairman. Thank you for having this hearing. I must admit the longer you have these political jobs, the more depressing you get sometimes when you see human beings doing things to other human beings. I am old enough to remember introducing a second-hand smoke ordinance as a restaurant owner in Concord, California 30 years ago. I am also old enough to remember doing an ordinance at the county. It was a public health ordinance. And our hearings then showed very clearly the tobacco industry was marketing directly through retailers all across the country, where they put their placement of advertising. So how close it was to other products that kids would be drawn to. Literally research that they had done showing the height when kids came in.

I also remember being a restaurant owner - having owned multiple liquor licenses - that when we went through Mothers Against Drunk Driving where colleagues of mine in the restaurant business said, "well, if we try to assume more liability, then we will go out of business, we should protect small business," and thinking and talking to colleagues at the California Restaurant Association saying, "well, why would we want to be in business if that is what..." and, of course, we passed laws that have helped with that.

So here we are again, and, Ms. Berkman, I have had some fairly regular group of young people that is growing in my district in the San Francisco Bay Area come into my office, and they are trying to do similar things that we did with tobacco settlement money, getting young people to help advocate. But they are also telling me stories pretty compelling that on their campuses, this is pervasive, and there is a reinforcement from the marketing, from peer to peer that it is not dangerous, that people have taken care of all that. You have had the same experience I take it.

Ms. BERKMAN. Yes, and actually we have a PAVE group, Parents Against Vaping group, in San Francisco where we are working all the time. But, yes, peer-to-peer, even now when there has been so much talk about the harmful content of these sweet JUUL pods, the known toxins, the nicotine, kids still don't get it, right? They think it is water vapor. I mean we heard those numbers earlier. And you said, we have been here before and we should not be here again.

We don't want our kids to be guinea pigs for this experiment, especially when we saw what happened the first time around when big tobacco 1.0 targeted our kids. JUUL is big tobacco 2.0, and we can't wait. This is a race against time. If we don't act soon and take the flavors off the market, because the flavors continue to hook the kids, then the generation of nicotine addicts and worse.

In West Virginia, for example, I know that the member just left the room, but there is research that has given conclusive evidence of cardiovascular damage caused by e-cigarettes. So there is known damage, not only to developing brains, but cardiovascularly. And I keep hearing over and over we don't know yet, we are waiting. These are kids. There is known harm now. Why wait and, God forbid, see what happened the time around. We don't have that time, so thank you.

Mr. DESAULNIER. Dr. Winickoff and Dr. Jackler, so secondhand smoke. It strikes me, and this is where we were effective with tobacco, and particularly, say, in Northern California where it started in California, as a public health issue to employees. Having been in the restaurant business in the 70's—I am dating myself—you couldn't wear your clothing a second day because of the stench of tobacco, someone who has never been a smoker. Why should it take long for us to look at the measurement and the content of what is in these products and measure it against what we already know about secondhand smoke?

Dr. WINICKOFF. Pediatricians worry a lot about this, and in the family context, we have some smokers which have gotten the message and smoke outside, but for parents, they will be vaping right next to their child. Those ultra-fine particles are getting into their children's lungs. And, in fact, when they vape indoors, the entire surface of that home becomes coated in an ultra-fine particulate of nicotine and other chemicals. Now, kids interact with their environment in a very intense way. They exhibit mouthing behavior. They breathe from close down to the floor, and they may only way a 10th as much as adults, so they end up eating house dust and getting in a level of toxic aerosol that is probably 20 times higher than what a nonsmoking adult in that household would get. And that is concerning for us.

Mr. DESAULNIER. Doctor, do you have anything to add just quickly?

Dr. JACKLER. Well, just the place of use regulations around smoking and vaping need to parallel. Otherwise, what happens is that smokers will use them in the workplace, in recreational places, in automobiles with their kids and things, and that is not a good thing. So those local policies are very important to parallel.

Mr. DESAULNIER. Ms. O'Leary, can you talk a little bit about how the industry has targeted Native Americans and the tribal community?

Ms. O'Leary. I think there has been historical tactics by the tobacco industry to target many groups that are at risk, including American Indians, as well as others that have been stated already. But I think the main thing is, you know, getting product to the reservation. I think that tobacco industry feels a little bit invisible on the reservation. We have, you know, no compliance checks that happen on the reservation by FDA because it is a sovereign nation. So there is great concern about what JUUL coming to the reservation and trying to hide behind nondisclosure agreements could result in.

I have heard that there are multiple other tribes that have been approached by JUUL, but I have really struggled to find anybody that is willing to speak with me about it, and it is likely because

that there has been NDAs signed by these tribes. So I think that it is ruthless the attempts that are going on to embed these at-risk populations. Thank you for your question.

Mr. DESAULNIER. Thank you so much, and thank you to all the panelists. I yield back, Mr. Chairman.

Mr. KRISHNAMOORTHY. Thank you, Congressman. Congressman Grothman, you have five minutes.

Mr. GROTHMAN. Okay. I don't know a lot of people use e-cigarettes. You sure don't seem around like you used to see cigarettes around when I was a child. Good grief, when I was in high school, they had a smokers lounge in the high school. But at least one person I know well who vape credits this with, you know, stopping smoking cigarettes. And I wonder do you feel in this an effective way? If that is true, we are saving lots of lives aren't we? Could you respond to the idea that this is an effective way to stop smoking?

Dr. JACKLER. There is certainly potential that electronic cigarettes, particularly those that are high nicotine, that when the user breathes them in has a similar spike in nicotine that the—

Mr. GROTHMAN. Well, people know about by now. Does it work or not work? Is this an effective way to stop smoking?

Dr. JACKLER. We actually don't know scientifically very well. There are certainly anecdotes, as in your friend. Some adults will dual use smoke and vaping and keep their nicotine levels high even in places they can't smoke. So it can be a deterrent to adults. Certainly it is probably better than patches and gums, but still marginal.

Dr. WINICKOFF. And I would just add that we have not seen strong evidence that flavored e-cigarettes are necessary for adults to stop smoking. I think if a manufacturer develops a flavored e-cigarette that generates data and proves that it would help adults quit smoking and not attract children, then the manufacturer is able under the law to ask FDA to approve it as a cessation device or authorize it as a new tobacco product. But for now, the evidence is strongly in favor of taking flavored products off the market.

Dr. WINICKOFF. Doctor, you wanted to speak.

Mr. NIAURA. Yes, so I just take issue with the notion that there is not strong evidence. We do have, you know, the results of a randomized controlled trial, which is the gold standard for scientific evidence, published in probably the most prestigious medical journal in the world, the New England Journal of Medicine, earlier this year, demonstrating that, you know, smokers who managed to switch to e-cigarettes quit at twice the rate compared to those who use nicotine replacement therapy. So the evidence base is building so, you know, I don't think we can any longer say that we don't have evidence that these products that can help smokers quit.

Mr. GROTHMAN. Well, you know, America, at least we are told is supposed to be a free country. Why do you think, what is the reason for these other people then to not want to allow people to use e-cigarettes if there is some strong evidence out there that it is a way to stop smoking? What is their motivation? Do you know?

Mr. NIAURA. Well, I don't know. I think a lot of this has to do with, you know, these are these are relatively new products. There are a lot of unknowns, and I understand the tendency to want to

rely on, you know, proven methods such as, you know, medications and nicotine replacement therapy. But this is now a consumer product that has kind of taken things by storm, and again we are seeing signals that are positive.

So from my point of view, if this is a type of product that actually is consumer friendly and is more apt to be used by smokers compared to some of these other products, then we ought to look for ways to leverage that opportunity to help smokers switch.

Mr. GROTHMAN. Okay. I have one general thing. You know, they give us all this data, and I am not sure whether this is right or not. I guess in 2018, the FDA claimed that 20 percent of high school students vaped in the last 30 days, but I know how, you know, the world works. If your buddy has got a vape, maybe you vape. It also says here that only six percent use it more than 20 days per month, and only four percent described themselves as daily users. So, you know, it seems like one of those things that kids have when they pass it around, but really we are under four percent. Does anybody think those numbers are wrong?

Dr. WINICKOFF. That is exactly how tobacco use starts. Tobacco products begin as an intermittent use, and they graduate to daily use. So there is nothing surprising about that data. In fact, the standard, the gold standard for assessing adolescent current tobacco use is past 30-day use. So there is nothing unusual about that data.

Ms. BERKMAN. Congressman, if I may?

Mr. GROTHMAN. Yes.

Ms. BERKMAN. I am a mother of four children, of four teens, and I can tell you that this is rampant. You can ask. I mean, we are trolled and harassed and threatened all the time by the pro-vaping community. We are not prohibitionists. We want the flavors that are hooking the kids off the market.

Mr. GROTHMAN. I am going to run out of time, so I am just going to ask you. So you are saying that when I have this FDA data that less than four percent of the kids vape every day, you think that FDA data is wrong.

Ms. BERKMAN. I am telling you that kids under report. They don't admit it. Then some of those early studies, unless you ask someone if they are JUULing. If you ask them if they are vaping, they will say no because kids do not associate vaping and JUULing. It is, like, Kleenex or band aids. And there have been articles written about this and studies written about this. I know because my son and I have commented on those stories. Kids think they are JUULing. They don't think they are vaping. They don't think they are using e-cigarettes. They just know that they are JUULing. That is the truth.

Mr. GROTHMAN. Thank you.

Mr. BERKMAN. I also ask you, would you say that nicotine addiction is something that goes away after a couple of days or it just a fad?

Mr. GROTHMAN. Well, I don't know, so I don't have an opinion.

Mr. KRISHNAMOORTHY. Well, thank you. We have two final lines of questioning, three minutes each. This is going to be a little bit of a lightning round here. Congresswoman Tlaib, you have three minutes.

Ms. TLAIB. But it was getting so good, Mr. Chairman.

[Laughter.]

Ms. TLAIB. Mr. O'Leary, thank you so much for being here, and I want to give you majority of the time because I read on February 1, JUUL came before your health committee of your tribe, and they were proposing the product and so forth. But, you know, one of things I would love for you to talk about is, you know, the statement that they said is that the letter said from JUUL, the tribe said it was to promote JUUL as a healthy way for patients for patients to quit smoking. JUUL wanted the tribe's health department to provide the JUUL starter kits for free of charge to tribal members trying to quit smoking as part of our smoking cessation program. And so if you can talk a little bit about that, and, you know, who was in the room. I know some people had to sign some sort of right to be able to come forward and disclose.

And, Mr. Chairman, as Ms. O'Leary starts, I think for the record, you know, JUUL, from a number of folks up here, has misled the American people, has lied, has used our broken system to honestly target and then manipulate and say that it is not going to cause certain things. We can continue to say we are going to study, study. But I can tell you when I go into kids because I say well, you know, they always ask me what I do for a living. I tell them, you know, I make laws and things, and they are still looking at me. I say, you know, when I was a kid when I went to a restaurant, they would say, "okay, how many people in your party?" The second question they would ask is, "do you want a smoking or a non-smoking section?", and all the kids look at me. These second and third graders, they are like, "what are you talking about?" I said, yes, they used to smoke in restaurants. "No way!" Oh, they used to smoke on airplanes. Uh-uh. In hospitals. "Eww."

You know, and it is like [to] these kids that is crazy, but they used to gaslight us to believe that secondhand smoking wasn't killing us. And I am not going to get here and allow the committee to be used by anybody, even from the other side, to say that e-cigarettes, vaping, JUUL is not killing our people. They are. It is leading to health harms, leading to addictions that are going to hurt people.

So with that, I am so sorry, Ms. O'Leary, you can have the rest of my time. I really do want to put it in the record what they did in your tribe.

Ms. O'Leary. I share your passion. Thank you for your comments. So what happened is when they came, it was in front of initially the tribal council, and that is when they handed out free product to our decision-makers. Free product. And we have council members now who are regular users of JUUL when it was initiated at that meeting. They were then re-routed back to the correct process, which is through the committee level of the tribal governments system. So they went to the health committee, and at that meeting, that is when they made those claims of less harm and smoking cessation. I will reiterate that that is not allowed. They cannot claim smoking cessation or at less harm at this point.

I also want to say that, you know, there has been a lot of questions about that it might be effective for smokers, but there is also data that suggests that for every one person who is able to quit

using JUUL, 81 kids will start. So the rate at which the smokers are finding this product helpful, it is incredible the amount of uptake that we are seeing in our youth. And I think that the tobacco industry in general, as well as JUUL specifically, targeting at-risk populations, like American Indians and African-American, and youth, it is, again, I say ruthless. There is no end in sight for these companies unless there is some regulations that take place by Congress.

Ms. TLAIB. Mr. Chairman, I hate calling it regulations because they have hijacked that word. It is called accountability. Thank you.

Mr. KRISHNAMOORTHI. Thank you, Congresswoman. And our final three-minute line of questioning, Mr. Cloud.

Mr. CLOUD. Well, with that buildup, I just had three questions. We will try to get through in three minutes. I wanted to clear up the data. I guess teen vaping use is up. We talked about that. Overall, teen cigarette use is down.

Dr. WINICKOFF. No.

Mr. CLOUD. No?

Dr. WINICKOFF. In the latest year, actually for the first year—
Mr. CLOUD. My question was overall tobacco use.

Dr. WINICKOFF. Yes, teen use is increasing actually in the last year according to national data from the CDC.

Mr. CLOUD. There are different sets of data. Does everybody agree with that?

Mr. NIAURA. There may be a flat line, but it is not increasing.

Dr. WINICKOFF. The data show that it is increasing, but we can show you the data. We will submit it.

[The information referred to follows:]

Mr. CLOUD. Overall tobacco use. Overall tobacco use? I would be interested to see the study, Mr. Niaura.

Mr. NIAURA. It is in my written testimony.

Mr. CLOUD. Right, okay. Yes, I looked at that. Why the increase? Why the decline, I guess, if you can—

Dr. WINICKOFF. Well, I think that what we would have seen had JUUL not been around, had e-cigarettes not been around, I think we would have seen a very steep decrease in adolescent tobacco use. Unfortunately, what we have seen is a flat line, as Dr. Niaura mentions, a slight uptick in the past year. This is a problem because when I ask kids do you like—

Mr. CLOUD. I only have a little bit of time. I have to move on.

Dr. WINICKOFF. Yes, go ahead.

Mr. CLOUD. I think we covered most of what you are saying.

Mr. NIAURA. Well, if you look at the—

Mr. CLOUD. I understand there is a decline. Why is there a decline?

Mr. NIAURA. Yes, if you look at the patterns over the past, you know, four or five years, again, we are record lows for youth smoking, which, you know, is hard to reconcile with the fact that, you know, teen vaping is up. Those are just the facts.

Mr. CLOUD. And when you say “youth smoking,” that includes vaping?

Mr. NIAURA. Cigarette smoking. No, no, just cigarettes.

Mr. CLOUD. Yes, that was my question.

Mr. NIAURA. Cigarette smoking.

Mr. CLOUD. Okay.

Dr. WINICKOFF. Total product use is up dramatically in the last few years.

Mr. CLOUD. Okay. That is—

Mr. NIAURA. But that includes vaping.

Mr. CLOUD. Okay. That was the question I was trying to get to. Thank you. Both Jackler and Niaura, you touched for a second on patches and others. Could you touch about 20 seconds on e-cigarettes compared to those other alternatives, patches, what have you?

Mr. NIAURA. Right. So, you know, nicotine patches are a form of nicotine replacement therapy, proven to be effective to help smokers quit. Again, this one study appears to show that e-cigarettes are even better than nicotine patches. But my interpretation of that is that e-cigarettes are actually a form of nicotine replacement therapy. They are just more efficient. They are better at doing it compared to products like patches.

Mr. CLOUD. Okay. And of course we are all talking outside the context of teens when we are talking—

Mr. NIAURA. Yes. No, this is for adults.

Mr. CLOUD. Right. How can policymakers ensure that non-combustible nicotine products, like electronic cigarettes, are available for smokers wanting to make a transition while limiting the access of unintended users like youth? What are your recommendations?

Mr. NIAURA. I don't have any concrete recommendations because I think this is a very tough issue. We are seeing a lot of suggestions coming out from folks in terms of different types of, you know, restrictions in terms of where products can be sold, maybe restricting flavors and so forth. I think these are important conversations that we ought to continue to have to figure out the best road forward.

Mr. KRISHNAMOORTHY. Thank you. I will let Dr. Jackler finish.

Dr. JACKLER. So high nicotine products like JUUL, and it has exceptionally potent nicotine, from my point of view, should be available by doctor's prescription for adult smokers. I care very much about adult smokers and would like to have products that help them quit, and I think it is a superior product compared with patches and gums. But they should not be on the market to be bought over the counter in sweet and fruity flavors by kids.

Mr. KRISHNAMOORTHY. Thank you very much, Doctor, and you to the first panel for their testimony. With regard to the panelists, if you could please come back to the anteroom. We are going to switch out, and we are going to have our final panelist, Senator Dick Durbin, and we will hear from him. So we will take a two-minute break just to switch out the panelists. And please, audience, please stay seated for Senator Durbin.

Well, welcome, Senator Dick Durbin, to the Committee on Oversight and Reform, Subcommittee on Economic and Consumer Policy. My favorite senior senator from my home state of Illinois.

[Laughter.]

Mr. KRISHNAMOORTHY. Senator Dick Durbin needs no introduction on the issue of his valiant advocacy efforts to combat smoking among youth, and also to combat smoking in general. He is the au-

thor of the Ban on Smoking on Flights in America, which came into being in 1990, 29 years ago, when he was a member of this House. At that time, powerful interests in the tobacco industry fought his efforts to put this law into place, but now we know the tremendous positive impact of that law. And we have Senator Durbin to thank.

But he has also been an outstanding advocate on the issue of fighting e-cigarettes for youth, and so we welcome him to our committee. Without objection, sir, your written statement will be made part of the record. And with that, Senator Durbin, you are now recognized for your statement.

**STATEMENT OF HON. RICHARD DURBIN, A UNITED STATES
SENATOR FROM THE STATE OF ILLINOIS**

Thank you, Chairman Krishnamoorthi and Ranking Member Cloud, for holding this important hearing. It is good to be back in the people's House of Representatives and also to be at a hearing flanked by the Campaign for Tobacco Free Kids. It seems like old times. But I know today you are taking a close look at the role of JUUL and the FDA and how we have reached this point where we are facing literally, in the words of the FDA, a vaping epidemic.

You know the numbers. In the last year alone, 80 percent increase of high school students vaping, 50 percent increase in middle school students using e-cigarettes. Today because of devices like JUUL and the accompanying kid-friendly flavors, 4 million children nationwide are vaping. JUUL and other e-cigarette companies like to claim that their products are only meant for adults looking to quit cigarettes, but a look at the facts quickly dispels that notion.

Here's the starting point. There is no clinical trial proving that JUUL devices help adults quit smoking cigarettes. None. Despite all the marketing claims and all the paid testimonials, there is no credible medical evidence of JUUL's most fundamental marketing claim. None. Further, more than 20 percent of children under the age of 18 are using e-cigarettes compared with less than three percent of adults. JUUL knows exactly where the money can be found, and it's not from adults looking to quit smoking. It's kids.

Today's youth vaping epidemic is a new version of an old battle that I'm personally familiar with. I won't go into the details, but on Friday, November 13, 1959, one week before my 15th birthday, I stood at my father's hospital bedside as he died from lung cancer - two packs of Camels a day. He was 53 years old. When I came to Congress, I decided to make tobacco my issue. We had some success, as you noted.

In 1987, in my third term in the House, second term on the Appropriations Committee, I successfully passed an appropriations amendment banning smoking on 80 percent of airline flights in the United States. It was a major miracle. No one expected this young Congressman from Illinois, with the opposition of both Republican and Democratic leadership, to pass this measure on the floor. What they failed to understand is the House of Representatives is the largest frequent flyer club in America, and they sick and tired of secondhand smoke on airplanes and voted with me. The bill was signed into law by President Ronald Reagan despite big tobacco

fighting all the way. They called my ban “an intrusion on individual rights.” You may hear echoes of that in this room today.

It was just the first step. I didn’t realize that eliminating this inconvenience was a tipping point, but it was. It turned out that a lot of people thought, well, if secondhand smoke is dangerous on a plane, why isn’t it dangerous in a movie theater, in a restaurant, in a bowling alley? We also went directly after big tobacco’s efforts to addict children, which is why we made cigarettes more expensive with taxes. That is the single greatest deterrent to children turning to cigarettes.

We dumped Joe Camel and the Marlboro Man as part of a national lawsuit. We prohibited kid-friendly flavors in cigarettes like strawberry and grape. And since these historic changes, the percentage of youth smokers declined from 28 percent—28 percent—in the year 2000 to less than eight percent today. However, anyone who believes that the multibillion dollar tobacco industry would go quietly ignored the power of their greed, and that is why we are here today.

Losing their precious market share, big tobacco put their researchers and marketers to work. First, they needed a new product that didn’t carry the moral taint of cancer-causing tobacco. Even better, if it looked like a USB flash drive, it could easily slip into a kid’s laptop. They needed a campaign that included an unproven, positive health claim such as JUUL’s current Make the Switch slogan. They relied on a multibillion dollar, \$12.8 billion, investment from an old standby, Altria, formerly known as Phillip Morris. They needed a special strategy focused on kids because they knew that children, for a variety of reasons, are the most susceptible new users of products. It worked with cigarettes. It was going to work again with JUUL and vaping.

How did they lure the kids? I have got a bag full here, of all of the different flavors. I won’t go through them all, but they include Fruit Medley, Gummy Bear, Whip Cream, Unicorn Poop, Razzle Berry, and Cotton Candy. Now, go tell me that is all about adults switching from cigarettes to vaping.

Finally, and this is critical, they needed the Food and Drug Administration to look the other way as their massive empire mushroomed and metastasized. Unfortunately, the FDA has been happy to serve as that accomplice, delaying commonsense regulation of the e-cigarettes industry by years, refusing to remove illegal products from the market, and standing silent in the face of these false health claims by JUUL. I have made it clear to the acting FDA commissioner, Dr. Sharpless, and Commissioner Gottlieb before him, that FDA’s hapless spectatorship has to come to an end, whether by law, regulation, court order, or discovering the political will to get off the sidelines.

So what’s been the result of big tobacco and big vape’s efforts combined with the FDA’s as abject failure to regulate the industry despite their authority? Between 2017 and 2018, the number of American teenagers using any tobacco product increased by nearly 40 percent. This was the largest single-year increase in youth tobacco use ever. That’s right, all of our significant, hard-earned gains to reduce youth use of tobacco products are being reversed because of e-cigarettes like JUUL and the accompanying kid-friend-

ly flavors. And all of the full-page JUUL ads decrying children, you know where you see them? You see them in The Hill, Roll Call, Politico, Washington Post, New York Times, Wall Street Journal. This isn't a new tactic. That's exactly what big tobacco did when we said lay off the kids. They bought full-page ads in the Wall Street Journal saying we don't want kids to smoke cigarettes. How many kids do you think get up in the morning to read the Wall Street Journal? Exactly none. This is just a PR campaign now by JUUL, once by big tobacco, to try to say that they have a business model that really isn't directed at kids. The facts tell us otherwise.

To combat today's vaping epidemic, I've introduced bipartisan and bicameral legislation to crack down on kid-friendly e-cigarette flavors. I'm joined by Senator Lisa Murkowski, Republican of Alaska, and Representatives DeGette and Raskin. Our Safe Kids Act would give each e-cigarette companies one year to prove their products meet three criteria. First, companies would have to prove that their products actually help adult cigarette smokers to quit. Second, they'd have to prove their products don't harm the people using them. Third, e-cigarette companies would have to prove their products do not cost children to start using nicotine.

If a Federal Tobacco to 21 bill this year, year and I think it might in the Senate, it's imperative that the legislation include strong provisions to crack down on kid-friendly e-cigarette flavors that are addicting our kids.

As someone who lost his father as a kid to smoke-related lung cancer, I had hoped that e-cigarettes would prove to be a smoking cessation device for adults. To date, there is no proof. Instead these devices and the candy dessert fruit flavors are causing children to develop this addiction at far greater rates than they're helping adults quit smoking cigarettes. A recent Dartmouth study found that e-cigarette use leads to 81 new smokers for every one smoker who quits. According to the Truth Initiative, 15-to 17-year-olds are 16 times more likely to use JUUL compared to people over the age of 25. A recent study published in the Journal for the American Medical Association found the teenagers who start vaping are three times more likely to go on to smoke cigarettes than teenagers who don't. And consider this: JUUL is widely popular with kids and accounts for 70 percent of e-cigarette sales in the United States.

Make no mistake. JUUL, now partnered with tobacco giant, Altria, is driving this epidemic even as they come before this committee and pose for holy pictures. Congress waited for too long to start protecting children from cigarettes. History is now repeating itself with e-cigarettes. Our inaction, combined with FDA's complacency, is dooming an entire new generation of children to nicotine addiction. Most parents care when their teenager is lost in a cloud of vape smoke. Does Congress? I look forward to working with you on a bicameral basis to address public health epidemic head on.

I will close by saying this. I never dreamed when I went after taking cigarette smoking off of airplanes in my third term in the House, for God's sake, that I had a chance to win, but I did. The net result of it, because of unforeseen developments, was a change, a dramatic change, in America in their view toward smoking. We stepped in at that moment finally and took on big tobacco. The question is can we work the bipartisan political will to take on big

vaping now for the benefit of the young people sitting behind me and those across America? Thank you, Mr. Chairman.

Mr. KRISHNAMOORTHY. Thank you very much, Senator Durbin, for that eloquent statement, and thank you for your efforts, your lifelong efforts, to combat nicotine use.

I want to thank all the panelists, I want to thank the entire audience for taking time out of your busy schedules to be here. Part 2 of this very, very important hearing is tomorrow when we have the founder of JUUL before us at 2 p.m. in this very same room.

I ask unanimous consent to insert the following items into the official record of the hearing: the statements from Dr. Bonnie Halpern-Felsher of Stanford University, a statement from Dr. Brian Primack, a letter from Kamal Mazhar, president of Teens Against Vaping, and a letter from Dr. Frances Leslie of the University of California, Irvine.

Hearing no objection, so ordered.

Mr. KRISHNAMOORTHY. We are adjourned.

[Whereupon, at 10:55 a.m., the subcommittee was adjourned.]

