The Power of Prevention: Building on 10 Years of Success in Public Education and Teen Tobacco Prevention Webinar Transcript

Allison Alexander:

Welcome, and thank you for joining us today. I'm Allison Alexander and I've worked in public education at the Center for Tobacco Products since 2015. Over the past decade, "The Real Cost" campaign has educated youth on the dangers of cigarettes, smokeless tobacco, and e-cigarettes. We are thrilled to commemorate "The Real Cost's" 10-year anniversary with all of you today. Let's meet our speakers.

Today, you'll hear from our Center Director, Brian King, and our esteemed leaders in the center's Office of Health Communication and Education, including our new Office Director, Anne Rancourt; Deputy Director, April Brubach; Gem Benoza, the Director of Campaigns and Public Education; and Bao Zarndt, the Director for Research and Evaluation.

A quick run of show. We will cover information about how the Center for Tobacco Products approaches tobacco regulation, and how education is a crucial piece of that puzzle; how "The Real Cost" campaign stays up to date with teens, the tobacco landscape, and the media environment; the impact and effectiveness of "The Real Cost" campaign; and what's on the horizon for the public education program.

We have time at the end of this webinar for Q&A with our presenters. I encourage you to submit your question at any time during the webinar by using the "Q&A" box in the bottom toolbar. The questions you enter in the box will be sent directly to our team after you click "send." We will also be answering questions that were submitted as part of the registration. Be aware that due to limited time, we will only be answering questions that are related to the topic of this meeting.

To ensure the best video and audio quality, we recommend closing other applications you may have open. To turn on live captioning, select the "live transcript" button in the bottom toolbar, and then click "show subtitle." We have a lot of great information for you today about "The Real Cost" campaign and what we've achieved over the past decade. But, before we jump in, we would like to share a video that shows the lives this landmark campaign has touched.

The young people featured in this video grew up with "The Real Cost." They were teenagers, the campaign's intended audience, over much of the past decade and have seen and experienced firsthand the power of the campaign. They are now young adults. We asked them to share in their own words how the campaign has impacted their lives. Let's watch.

[start of video]

Multiple Speakers: "The Real Cost" ads-- "The Real Cost" --

Male Speaker (Benjamin): "The Real Cost" ad I remember most -- Male Speaker (Omar): When a man, like had pulled out his teeth.

Female Speaker (Autumn): That was just so vivid.

Male Speaker (Phelim): [unintelligible]

Female Speaker (Zayneb): Tiny bully.

Female Speaker (Katie): The contract one.

Male Speaker (Benjamin): The metal monster campaign.

Female Speaker (Rebekah): It affects your appearance, your skin.

Female Speaker (Zayneb): Putting metal in your lungs.

Female Speaker (Sifan): I was struck.

Female Speaker (Kirtia): Uneasy.

Male Speaker (Omar): And like, we just couldn't imagine it, you know, in our 12-, 13-year-old minds, it's just like whoa.

Female Speaker (Kirtia): I didn't know that cigarettes could do that much damage to somebody's, you know, physical body.

Female Speaker (Katie): The biggest thing that I learned from "The Real Cost" campaign is that addiction is messy.

Male Speaker (Benjamin): When I saw the "Little Lungs" message, it made me feel like I wouldn't be able to grow up -that I would always be less and held back if I smoked.

Female Speaker (Tranae): "The Real Cost" is real. Female Speaker (Zayneb): And when I saw this, it's just not worth it.

Female Speaker (Autumn): The one "Real Cost" video... and this contract just rolls into a cigarette.

Female Speaker (Katie): I don't want to say, "sell your soul," but it kind of does feel like that sometimes.

Male Speaker (Phelim): One day you could -- you wouldn't know anything about vapes and the next day – and now that's become your life.

Female Speaker (Tranae): I'm just like, I don't want that to be in my future.

Female Speaker (Rebekah):

"The Real Cost" is so important for reaching kids like me who are exposed to smoking or nicotine usage daily and just don't know the consequences and don't know the dangers.

Male Speaker (Omar): "The Real Cost" ad really showed me like prevention from vaping.

Female Speaker (Sifan): Strengthened my values and why I don't smoke in the first place.

Female Speaker (Zayneb): But it just kind of solidified me on, "oh yeah, I'm never touching that."

Male Speaker (Omar): It definitely like, changed my mind, like seeing these types of ads.

Male Speaker (Phelim): "The Real Cost" just helped me reinforce that I didn't want that to be part of my life.

Female Speaker (Zayneb): If I was to toast to the to "The Real Cost," I would raise my glass and I would say that "The Real Cost" has guided me.

Female Speaker (Kirtia): Thank you for always keeping me in check, always being honest.

Female Speaker (Katie): Showing the ugly side of what smoking can be.

Female Speaker (Tranae): Thanks for helping me stop like if you all weren't there. I don't know, I'd probably still be doing it.

[end of video]

Allison Alexander:

How inspiring and a great reminder of why we do what we do. A true testament to the power of prevention. And now, without further delay, I will turn it over to the Center for Tobacco Products Director, Brian King.

Brian King:

Great, thank you, Allison. It's a pleasure to be joining you all on this afternoon and I appreciate all your interest in this critically important public health topic. So, for my part today, I'd like to take us a step back, to acknowledge where public education fits into the larger picture of comprehensive tobacco regulatory efforts. So, I'm going to start with some information about how tobacco use affects people living in the United States, which I suspect many of you on this call will be all too familiar with. But none of us should be numb to these statistics. And it's really important that we keep reiterating these points, and that's that tobacco use remains the leading cause of preventable disease and death in the United States.

And each year, there continues to be about 480,000 deaths due to smoking in the U.S. alone. And for every single person who dies from smoking, there's another 30 that are living with smoking-related disease. And it's also important to note that it's not just the human toll. Tobacco use also places a considerable burden financially on society. Smoking alone costs the country \$600 billion per year—that is billion with a B—in direct health care and lost productivity costs.

But the good news here, is that we are making considerable strides to address this. Smoking rates in particular have been coming down considerably over the past several decades, which I believe is one of the greatest public health accomplishments of the past century. And the good news is we've also seen some progress on other fronts as well, including declines in e-cigarette use among youth, which we now have about half the number of U.S. kids using these products as we did just five years ago, which is definitely a public health win. That said, we can't rest on our laurels, and there's more work to be done. And so, for FDA's part, we're committed to using the full force of our authorities to make sure we address this public health issue head on.

And so, at the Center for Tobacco Products, or CTP, as we affectionately refer to ourselves, our vision is to make tobacco-related death and disease part of our nation's past by ensuring a healthier future and advancing health equity for those who are living in the United States. And to accomplish this, our mission is to protect the public health of the U.S. population from tobacco-related death and disease. And we do this in multiple ways, including comprehensively regulating the manufacture, distribution, and marketing of tobacco products; we also educate the public, especially youth, about the dangers of using tobacco products; and we're also promoting and supporting strategies that ensure an equitable chance of living a healthier life for everybody.

Now, our center employs a comprehensive approach to do this—and comprehensive is key in everything that we do—to reduce the negative health effects of tobacco use. And so, that multipronged comprehensive approach that we use includes issuing regulations and guidance to protect public health, also reviewing tobacco product applications to uphold science-based regulatory standards. We also undertake actions to ensure tobacco product manufacturers and retail establishments comply with laws and regulations. And importantly, we also educate the public on the risks of using tobacco products and the benefits of cessation.

And that last component of those four is our topic of focus today. And CTP has comprehensive education efforts that we've designed to reach both youth but also adult audiences. And our education activities ultimately go hand-in-hand with all those other activities in the center that I noted, such as issuing regulations and reviewing tobacco product applications. And all of this is outlined nicely in our recently released five-year strategic plan, where we really reinforced the importance, over the next half decade, of our efforts to ensure that the public receives timely, clear, and evidence-based health communication education.

And this happens in a variety of ways because, again, comprehensive is key. And our threepronged strategy on that front is rigorous programs to educate youth about the risks of starting to use tobacco products; we also want to educate all people who use tobacco products around the benefits of cessation; and we also have targeted efforts to educate adults who smoke about the relative risks of different tobacco products.

But that first component, that youth prevention, is particularly important. Benjamin Franklin said hundreds of years ago that "an ounce of prevention is worth a pound of cure." He was right then, and the point still holds true today, particularly in the context of tobacco regulation. We do know that most adult tobacco product users first start before the age of 18. And so, this is a really critical, important window for intervention with evidence-based prevention messaging to prevent these youth from using these products and potentially being subjected to a lifetime of nicotine addiction and tobacco-related disease.

So, with that, I'm going to hand over the virtual mic over to April Brubach, who is our Deputy Director of our Office of Health Communication and Education, to share how "The Real Cost" uses a science-based approach to public health education with that critically important lens of prevention. So, with that, April, I'll turn it over to you. Thanks.

April Brubach:

Thank you, Brian. We heard from Dr. King about how public education is an integral part of the center's tobacco regulation strategy, and how mass media campaigns, like "The Real Cost" are important and effective health prevention—interventions—or, rather, public health interventions. There's a large body of scientific evidence that demonstrates science-based public education campaigns can reduce and prevent population-level tobacco use. And they've made significant contributions to the declines in tobacco use over the past several decades. Teen-focused campaigns like "The Real Cost," embody the essence of today's webinar, "The Power of Prevention." By preventing teens from starting to use tobacco, we safeguard the next generation from the devastating consequences of tobacco-related addiction, disease, disability, and death.

In the past decade, CTP has developed several public education campaigns as part of its approach to education. Beginning with the launch of "The Real Cost" campaign in 2014, the center launched other campaigns such as "Fresh Empire," "This Free Life," "Every Try Counts," and most recently, "Next Legends," which have all focused on educating specific audiences of youth and adults, about the harms of tobacco products and the benefits of cessation.

This graphic demonstrates the science-based process that CTP uses when developing campaigns. Starting on the left, CTP's foundational research approach includes monitoring national surveys, like the National Youth Tobacco Survey, or NYTS, speaking with experts, listening to stakeholders' input, and conducting primary research to ensure we understand the mindset of our audiences. In the middle phase, we identify scientifically accurate facts and messages and test them with our intended audiences. The messages that are the most compelling and persuasive become advertising concepts, which are then tested, once again in focus groups, or in-depth interviews with the audience.

In the rightmost section, we continue to monitor how the ads perform in market through surveys, media metrics, social media comments, and other means that allow us to make real-time optimizations. CTP also assesses changes in knowledge, attitudes, and beliefs through longitudinal evaluation studies and other studies to measure awareness and perceptions.

Now let's take a look at the intended audience for "The Real Cost" campaign—teens who are open to using or are already trying tobacco products. In developing "The Real Cost" campaign, first we needed to have a deep understanding of the teens who were using products and learn more about them. Let's watch this video to learn more about "The Real Cost" teen audience.

[start of video]

Female Speaker:

"The Real Cost" campaign has been effectively preventing teens from using tobacco products for over a decade. Even as new tobacco products emerge and teen risk perceptions change, "The Real Cost" remains relevant by understanding what motivates our audience. To accomplish this, we created distinct personas who embody the characteristics of teens who are at risk for smoking cigarettes, and those who are at risk for vaping. Let's meet them.

Say hello to Pete and Nikki. They come from more challenging environments and live with higher stress than the average teen. They're more likely to turn to tobacco, drugs, or alcohol to cope. Pete and Nikki are aware that cigarettes could be bad for them, but they don't believe they'll become addicted. So, they don't even consider the long-term consequences of smoking. In 2017, as e-cigarette use surged, "The Real Cost" quickly addressed this urgent public health need by expanding and creating a new persona.

Let's meet Jaime. Jaime is goal-oriented, does well in school, and values personal relationships. But the peer pressure from these relationships motivates Jaime to consider vaping as a way to fit in, among other risk factors. The personas we identified continue to evolve and inform our campaign. Adapting to the changing characteristics of today's teens allows "The Real Cost" to create breakthrough prevention messaging that changes the way our audience thinks about tobacco.

[end of video]

April Brubach:

Using our science-based campaign development process, here are just a few of the several hundred ads that "The Real Cost" cigarette prevention campaign has developed and released in the market over the past decade. These ads were created and tested based on the characteristics

we know that our intended audiences as seen in the previous video. As you saw in the video about the campaign audiences, we were running our successful cigarette prevention campaign when we started seeing a worrying spike in e-cigarette use among youth in 2017. We were able to respond quickly by expanding "The Real Cost" campaign to encompass prevention messages about e-cigarettes, or vapes, in addition to our cigarette prevention messages.

In 2018, we launched a full-scale prevention campaign for e-cigarettes under "The Real Cost" campaign umbrella. This is an example of how CTP's public education campaign program monitors trends, identifies needs, and then responds quickly, as we did with "The Real Cost" e-cigarette prevention campaign.

And here are just a few select ads from "The Real Cost" e-cigarette prevention campaign. These ads educate teens about the risks of vaping, including addiction, potential lung damage, and inhaling harmful chemicals.

This brings us to our first reflection point where we'll share our lessons learned over the past decade with those who work in public health and are interested in applying the successful model of "The Real Cost" to their own campaigns. I've shared a lot of information about how "The Real Cost" campaign developed audiences for cigarette and e-cigarette prevention efforts. And there are some overarching takeaways on this slide. When you're developing an audience for a public health campaign, it's important to incorporate research into the entire lifecycle of your campaign development, including before, during, and after you develop and release content.

You can get creative in finding feedback from your audience, including by reviewing social media comments, following Google search trends, and comparing national prevalence data. These insights can then be distilled down to a campaign persona that you reference when developing strategy and creative advertising. Since the world of teens is always changing, teenfocused campaigns must continually adapt to stay relevant. And now I'm very pleased to turn it over to Gem Benoza, the Director of the Division of Public Health Education, to share how we reach today's teens.

Gem Benoza:

Thank you, April. I want to start by diving into the lives of teens today. "The Real Cost" is designed to reach teens 12 to 17 years old, which covers two generations, Gen Z and Gen Alpha. They are the most diverse generation with 42 percent of teens identifying as multicultural. Their identities and goals are fluid, with 69 percent of teens agreeing, "I have different goals for my life than my parents had for theirs." As this graphic shows, they have a lot of issues on their minds, and this adds to their stress and affects their mental health. They spend an average of 8.5 hours on screens daily, which is primarily on their cell phone. They are referred to as digital natives, meaning they never knew a life without digital media. So, let's take a look at what that means.

This graph is based on Nielsen data and it shows how teen consumption of media has evolved in the last decade. When "The Real Cost" launched, we had traditional media planned, emphasizing TV. In 2014, nearly 70 percent of teens were consuming traditional TV and cable TV. Digital was considered a supplement to a paid media plan. Today it is very different. In the past decade,

you can see the light blue bar at the bottom. This represents traditional TV and cable. You can see how TV use has dramatically dropped down to 17 percent today.

What has grown is digital media. This includes streaming services like Hulu, Tubi, and Amazon Prime, social media like Instagram and Snapchat, audio streaming like Spotify and podcasts, and a variety of online platforms devoted to gaming, anime, content creation, and influencer content. Teens set the trends for media consumption, and they've shifted most, if not all, of their media consumption to digital.

In this new digital media landscape, the number of platforms and channels available to teens has exploded. This slide shows all brand logos of media platforms. And if you find it overwhelming, that's the point. There are so many more ways that we could reach teens today because there are simply more platforms to do it. Gone are the days where you could buy a channel like MTV, CW, or Nickelodeon, and reach a majority of teens. Media is too fragmented now—you need a mix of media channels to reach youth.

In addition, teens use media differently, so our content is built with that media interaction in mind. The use of mobile has really changed how teens expect to interact with media. They have shorter attention spans and ad units are now as short as 6 seconds. They create content. They block content. They expect to control and curate their content. They are constant – constantly multitasking. And they're not just passive consumers, they expect engagement.

So, let's take a moment for a pop quiz. According to the most recent Pew survey, what percentage of teens report that they are online almost constantly? Your options are 91 percent, 46 percent, 25 percent, and 13 percent. While I give people time to respond, I wanted to share some of the reasons teens say they spend time on social media. Most of them do it because it's fun, it provides entertainment, and helps them connect with their friends and family. While teens have learned to be more cautious about online content, it is a large part of their social life.

Are we ready to share the results of the quiz? The answer to the quiz is B, 46 percent of teens report they're online almost constantly. It's nearly doubled from what it was 8 years ago.

So, how do we reach teens? Our intended audience for "The Real Cost" are teens 12 to 17. Our goal is to reach teens and limit exposure to those who are outside of our teen audience, such as adult smokers for the e-cigarette messages. Let me discuss how we use different levers to ensure our messages reach teens. "The Real Cost" uses current advertising industry tools and best practices for reaching teen audiences. We are constantly evolving our tactics as the media environment changes.

Using marketing research, we focus on media platforms used by high numbers of teens such as Snapchat, Twitch, Fandom, and Instagram. There are platforms as Huddle and Quizlet that focus on high school students. We hone in on teens further by looking at relevant teen content or teen passion points. And use the digital platforms, programming, and influencers associated with those interest areas. Finally, when available, we use age registration data from media companies, which identifies users that fall within our teen-age range.

In addition to our media strategies, there are additional tactics we use when developing ads to emphasize the messages are directed to youth. We primarily feature teens or people who teens find to be aspirational or can relate to. We focus on teen situations such as school settings, the family dinner table, proms, and high school sports. And we use "teen-speak" when appropriate. We even developed a testimonial series where real teens discuss their personal experiences with vaping.

One of the media targeting tactics I mentioned—finding teen passion points—means we run our ads in places where we know teens are interested in that type of content. For teens today, that is gaming, sports, music, and movies and shows. You're probably noticing that these passion points stand the test of time and teens of all generations are interested in these topics. But what's different today is not what they're interested in, but how they consume media in these spaces.

Let's take gaming as an example. Gaming today is vastly different than it was even 10 years ago. Gaming is a source of community, social connection, and shared experiences for teens. If teens are not actively participating in the game, they're watching others livestream the game on platforms like Twitch or watching YouTube videos with their peers who record their gameplay and upload the video. There are professional e-sports leagues who have larger youth following than traditional professional sports leagues. There are music playlists for gaming, fan websites to research the game, gaming influencers, and game clips and content shared on all social media platforms.

This slide highlights the stat that 69 percent of teen gamers like to share their gaming experiences with others, which summarizes how teens engage with gaming. This means that when we tap into an insight like gaming, we create ad content that incorporates the many ways teens interact with gaming in their lives and extend our messages on many different platforms. It is not as simple as only running traditional 30-second ads on a gaming media platform anymore.

On this slide are some examples of how we took one message—vaping can deliver metal particles into your lungs—and extended it with different creative executions that adapted to fit in with different media channels. This way, teens are seeing the same fact repeatedly in ways that look and feel native to the platform where they are consuming media. We still need to develop traditional 30- and 15-second ads, but to break through the media clutter and the shorter attention spans of teens, we need to be more creative and relevant to grab their attention.

We also want to use teen passion points, so they're seeing the messages delivered by people or characters they recognize and follow. We try to customize our messages, so they feel native to the platform we run them in. For example, Snapchat uses filters on photos, which are designed to raise interest and generate discussions in the platform. So, we develop a filter that expands our messages. We also have interactive gaming experiences highlighting our messages because teens expect to engage and not just be passive viewers. We leverage popular teen brands and trusted sources who know the teen audience well to help us expand our messages in an authentic way.

This brings us to our second campaign helpful how-to's to highlight what we found helpful in conducting paid media campaigns. It's important to conduct research, as April said, about teens and with teens, whenever possible. But I know that's not always possible. When I worked at a community coalition where we didn't have a budget to conduct formal research, I would regularly talk to our youth groups and youth advisors to stay current. There are also good

national reports, like Pew, that can help provide good information about teen trends and media trends.

So much has changed in the last 5 years. It's important to understand that teens use and experience media very differently today and adjust your strategy as appropriate. I encourage you to go on these sites to see how teens are using them. Leverage the interest areas of teens to deliver the messages and media channels and contents teens choose to spend time on. Explore ways to state your messages in different ways to take advantage of different platforms.

For "The Real Cost," it is important for us to ensure we are getting our messages in front of teens and limit our exposures to those outside of our teen audience. We employ different targeting techniques like teen passion points to find relevant teen content and programming, and we use age or registration data, when available, to make sure our media plan is reaching our teen audience. I will now turn it over to my colleague, Bao Zarndt, the Division Director for Research and Evaluation.

Bao Zarndt:

Thanks, Gem. I'll now walk through how "The Real Cost" takes a science-based approach and how it personally impacts teens, as well as providing profound public health benefits. From its launch in February 2014 to November 2016, FDA's "The Real Cost" cigarette prevention campaign prevented up to 587,000 youth from starting smoking, half of whom might have gone on to become established adult smokers. As you can see, "The Real Cost" campaign has personally impacted many teens. And I'll show a few examples from some who grew up with "The Real Cost" as teens.

The quotes on this slide highlight how "The Real Cost" campaign personally impacted how some teens think about tobacco. Katie shares, "The Real Cost' has definitely helped change my beliefs and realize just how dangerous addiction can be." The campaign also inspired Autumn to start her career in public health who states, "Seeing ads from 'The Real Cost' helped inspire me to find a career in public health working in areas of substances and prevention for youth."

But not only has "The Real Cost" led to these individual benefits by preventing teens from trying smoking, "The Real Cost" has resulted in population and societal benefits. By preventing teens from becoming established smokers, the campaign will save them, their families, and the country more than \$53 billion by reducing smoking-related costs, such as early loss of life, costly medical care, lost wages, lower productivity, and increased disability. That's more than 180,000 in savings for each youth that would likely have become an established smoker.

This scientific evidence not only reinforces the importance of our public education efforts in reducing the public health and financial burden of tobacco use, but it also highlights the importance of investing in tobacco-related education campaigns. Investment in tobacco prevention can have huge returns. We owe the strength of these findings in the public health success of our campaign to the science-based approaches, which we'll now walk you through.

The success of "*The Real Cost*" campaign is rooted in evidence-based approaches to ensure that our youth prevention messaging effectively reaches, informs, and resonates with the at-risk teen audience. To achieve this, FDA grounds our campaign within a science-based framework that

includes the following: audience analysis and foundational research, formative research using mixed methods, and process and outcome evaluation research.

We'll briefly cover the audience analysis and foundational research portion. And to illustrate this, FDA may pursue foundational research to understand tobacco products use, beliefs, and trends among teens. And this really helps us to focus our prevention efforts on products that are appealing and popular among youth.

We also conduct audience analysis research to identify risk factors for tobacco use among our intended youth audience. This also includes identifying the social and digital platforms where we know teens are spending time, so that we can reach them. We conduct focus group research and in-depth interviews to find messaging themes that are relevant to youth. We also consult experts and key stakeholders to promote cultural responsiveness and best practices in health communication science.

FDA also relies on formative research using mixed methods. For example, we conduct focus group research to understand the way youth audiences respond to our content. FDA also conducts survey research with teens to assess if our messaging is understandable and effective, and there is minimal risk of unintended consequences. FDA also conducts frequent evaluation of our public education strategies and messaging. This helps us to understand how they influence tobacco-related knowledge, perceptions, intentions, and behaviors among our intended audiences.

Here, I'll walk through an illustration of how FDA's science-based strategies produce effective youth prevention ads. I'll also describe FDA's rigorous evaluation research that explains the effects of our campaign with teen audiences. FDA spoke with teens in focus groups and found that metal-related facts that underscore the impact of lung exposure to metal particles were compelling and attention grabbing to teens. Ad concepts built off metal facts provided "new news" and made them reconsider vaping.

This led to the "Scary Enough" ad, which uses a metaphor of metal particles morphing into metal monsters with special effects and music. This ad illustrates the concept that inhaling toxic metals can pose risks. FDA found this ad to be effective among our intended teen audience. On average, our teens rated this ad as 4.2 out of 5 on a scale that assesses how effective they perceive the message to be.

In partnership with RTI International, FDA conducts longitudinal cohort studies to evaluate the effect of youth exposure to our campaign. These studies assess the campaign's impact on youth-relevant outcomes such as tobacco risk perceptions, beliefs, intentions, and product use behaviors. Findings from a national youth representative sample of over 4,000 U.S. teens show that exposure to the "Scary Enough" ad led to increases in perceptions that vaping can expose the user's lungs to metals, that vaping can cause lung damage, and that vapes contain toxic ingredients. I'll play the video now.

[start of video]

Male Speaker:

If you vape you could be inhaling toxic metals into your lungs. To show how scary that is, we made metal monster... with special effects that show metal particles being inhaled, and music, music that will make your heart race. But nothing is as scary as the facts. Vaping can deliver toxic metals like nickel and lead into your lungs. That's metal... in your lungs.

[end of video]

Bao Zarndt:

On this slide, you'll see that there is a robust body of research that has shown and continues to show "The Real Cost" campaign's positive influence on teens and the sustained public health impact that it has. This body of evidence is supported by our FDA internal research, as well as those by our external esteemed colleagues. Due to FDA's commitment to evidence-based strategies and reliance on a cumulative knowledge base for health communication science and public health, "The Real Cost" has been successful in adapting its strategies for varied tobacco products, including smokeless tobacco, combusted cigarettes, and e-cigarettes.

This has been important over the past decade as we saw increases in youth e-cigarette use. At the same time, digital media increased while the use of traditional broadcast TV declined. And guided by the science, FDA's "The Real Cost" public education campaign, was able to shift to communicating the harms of e-cigarettes to teens via digital and social platforms. FDA's ongoing commitment to leveraging evidence-based and scientific approaches to adapt and evolve the campaign will ensure its continued success, even as the landscape and teens evolve.

But, there is more work to be done. Findings for the 2023 NYTS show that among U.S. high school students, current overall tobacco product use declined from 2022 to 2023. This decline was primarily driven by the decline in e-cigarette use, which translates to about 580,000 fewer high school students who currently use e-cigarettes in 2023. The success of FDA's public education strategies within "The Real Cost" campaign doesn't mean that we're going to go on autopilot. Tobacco use remains the leading cause of preventable disease and death in the U.S.

Although a decrease in e-cigarette use was seen among high school students, there was an increase in current overall tobacco products use among middle school students, and also increases in multiple tobacco products use. Given the ever-changing tobacco product landscape, FDA will continue to follow the science to ensure we're applying smart, public education strategies responsive to youth trends and patterns of tobacco product use. Our research will continue to ensure relevant and impactful campaign messaging, as well as identifying the insight as to who our at-risk teen audience is.

Additionally, we undertake research to understand where and how teens engage in a diversified digital environment to optimize our campaign implementation. Based on theory and scientific findings, we hone and innovate our evaluation approaches to measure the impact of "The Real Cost" campaign on youth beliefs, attitudes, intensions, and behavior in a diverse digital environment. I'll now pass the virtual mic over to our new Office Director, Anne Rancourt, to talk about where you can find "The Real Cost" and other tobacco prevention educational materials.

Anne Rancourt:

Thank you, Bao. And it is an honor to join this team with an historic track record of success. So, hello to everyone. And apologies if some folks had audio issues previously in the presentation, we will have a transcript available later. So, when CTP heard from teachers and school administrators that they needed education resources about vaping to use in their classrooms and to give to parents, the agency responded. And in September 2022, CTP launched an online hub with free science-based, standards-mapped lesson plans and materials that teachers can use to help students understand the dangers associated with e-cigarette use and nicotine addiction.

There are also materials like blogs, videos, and fact sheets. All content on the resource center is free, easy to navigate, and optimized for different audiences. Teachers can use these tools to promote learning, and parents and other trusted adults can use the tools as a starting point to initiate open conversations with youth about the risks of e-cigarette use. So, visit the link on the slide or scan the QR code to check them out.

We also continue CTP's long-standing partnership with the National Cancer Institute at the National Institutes of Health, which runs the smokefree.gov website. There's a teen-specific version of the site which you can find at teen.smokefree.gov, and it's full of excellent cessation resources for those who need help quitting cigarettes, vapes, or dip. We've worked with NCI to expand the content. There's a Vaping Reality Check Quiz and a Quit Plan Builder, in addition to other resources like texting-based cessation support through Smokefree Text.

Site traffic data shows that visitors who went to the site from "The Real Cost" campaign ads are more likely to create a quit plan compared to people who arrive at the site another way. And so, this helps show that "The Real Cost" is really reaching the teens who need help and driving them to the resources that they need. CTP also has the Tobacco Education Resource Library. This provides free digital downloads, print materials, web content, and social media content for public health partners. It's available at the link or at the QR code on your screen.

You may have heard of CTP's newest campaign, the "Next Legends" campaign. "Next Legends" aims to reach American Indian and Alaska Native youth, empowering them to live a vape-free life. We run ads in markets where these teens are most likely to live, and we have free campaign resources at the Tobacco Education Resource Library that I mentioned on the previous slide. So, if you're a public health professional who works with this population, please consider checking out and sharing these resources.

And so, as our presentation comes to an end, I just wanted to quickly summarize the continued success and impact that "The Real Cost" has had over the past decade. You heard about public education's role as a key part of CTP's holistic approach to tobacco regulation and how the tremendous work through the team here and our partnerships has measurable impact on reducing tobacco use among youth. We've demonstrated that we can quickly shift our efforts to adapt our approaches, like that of the youth e-cigarette use, to address public health needs. And additionally, our campaign continues to tailor our messages within our unique and relevant creative to reach our intended audiences where they are. We're proud to be recognized by our peers as an award-winning campaign, including a recent win—the Effie Awards—in the sustained success category.

So, we'd like to thank you again for joining us for this virtual commemoration of "The Real Cost's" 10th birthday. We'll continue to share insights and reflection points we've learned over the past decade at this year's annual public health—at this year's American Public Health Association, or APHA, Conference in Minneapolis. So, I hope you'll join us there in person if you're planning to attend on Tuesday, October 29, at 2:30 p.m.

We'll also have CTP booth exhibits at several other conferences and events throughout the remainder of the year. These include the National Association of County and City Health Officials Conference, the American Heart Association Scientific Sessions, the Essence Festival, and the American Academy of Pediatrics National Conference. So, if you happen to be at any of these events, please stop by our booth, say hi, grab some of the resources we have on hand, we'd love to chat with you.

And as you've heard today, CTP is committed to the ongoing support of our public health communities and other organizations in the prevention space as we educate youth and adults on the risks of tobacco use. So, along with the events I mentioned, if you have any questions or feedback on "The Real Cost" campaign, here are a few ways that you can get in touch with us. So, we'd love to hear from you and let's please stay connected.

And now I will turn it over to my colleague Brittney, who will moderate our panel of presenters as we answer some questions.

Brittney Lee:

Thank you so much, Anne. As a reminder, we'll answer questions that were submitted when folks registered for this webinar. And we'll answer questions that we're seeing coming through the question feature through the Zoom – through the Zoom link. We'll do our best to answer your questions in the remaining time that we have. Due to limited time, we'll only be answering questions that are related to the topic of this meeting.

So, we'll begin with our first question. What do you think is the most important – what do you think is most important to the success of future youth tobacco prevention campaigns? I'll pass this over to April to answer.

April Brubach:

Thank you, Brittney. There are so many important aspects that I think it can't really be understated how important it is to conduct research with the audience that you're trying to educate. So, to really understand them. For the center, with a national audience of teens who are open to using or are already trying tobacco products, this really requires us constantly staying up on trends and talking to kids. So, a deep understanding of teens' lives, if teens are your audience, and how they think about tobacco products, is essential for developing effective messaging strategy.

Here, we're continually doing qualitative and quantitative research with teens to keep a finger on the pulse of their lives and to get a better understanding of their knowledge, attitudes, and beliefs. And for organizations with smaller audiences, perhaps scarce for resources, there are still many ways to gather insights on your audience. So, you could look at the national data sets, Google search trends, social media platform listening, and combine this with a smaller number of focus groups and potentially a youth panel. So, whatever you can feasibly do in the research lane, will – I believe, really, the better you understand your audience through those means, will really greatly benefit your effort. Thanks, Brittney.

Brittney Lee:

Thank you so much. We're also receiving questions about how CTP prioritizes its activities. So, here's a question for you, Brian. Which has the most desired outcomes: education or regulation?

Brian King:

Yeah. Thanks, Brittney. So, appreciate the question. I don't think this is an either/or situation. This is a both. Communications are part of a comprehensive approach to tobacco product regulation. And so, that's why we have an Office of Health Education and Communication in our center, but also why we include it as part of the four major components of our regulatory portfolio. That said, it's part of a comprehensive approach. And even within that comms bucket, we also have several key components including the prevention angle, which you've heard so much about today. The importance of cessation among all persons. And also, importantly, educating about the relative risks of tobacco products, particularly among adults who smoke.

That said, in terms of our portfolio, we want to make sure that we maximize that impact by having that health comms component while also making sure that we're continuing the other important levers as part of our work. That said, it's also important to prioritize when you have set resources to make sure that you maximize your impact. And so, when you do have finite resources, you need to make sure that you're leveraging that in a way that's going to impact public health the most.

And that said, our prevention portfolio is particularly important given that we know the vast majority of adult tobacco users first begin before the age of 18. And so, we're really prioritizing our resources and efforts on that prevention lane. That is certainly something we're going to continue as a center. But, we've also got to be mindful of these other levers that can also be important to help us achieve our mission of reducing tobacco-related disease and death. Thanks.

Brittney Lee:

All great points, Brian. Thank you. The next question we have, I believe Gem will be the best person to answer this. What messages and messengers are being shown to resonate with youth who vape more than others?

April Brubach:

Gem is having challenges with her technology today. And it's not, of course, a meeting without at least one tech challenge. So, perhaps, Brittney, if it's okay with you, I can try to answer this.

Brittney Lee: That'd be fabulous, April. Thank you.

April Brubach:

So, as part of Gem's presentation, she really highlighted the two-way communication that teens want to create. They want to curate and control their own content. And, in terms of messengers, they're really drawn to people or brands that share their interests, and that they relate to and so,

they trust. And our experience, working with influencers actually can be an effective way to message to teens at large, including those at risk for tobacco product initiation.

So, to help the field kind of consider this approach, CTP published an influencer toolkit with best practices for public health practitioners who want to apply influencer marketing strategies to their own programs, especially those related to tobacco prevention. So, it shares very practical information and tips about influencer marketing, preparation, implementation, even measurement. And there are several case studies included in that toolkit as well, that provide kind of those real-world examples. And this is a free resource available to you at CTP's Tobacco Education Resource Library. And I'm hearing Gem is back available now. So, maybe I'll turn it back over to you Gem....I'm still not hearing anything. So, I will continue.

And in terms of what types of messages are most relevant and motivating to teens. You know, it's really – the way you find out is that you bring the messages to them, you hear directly from them about whether the messages are educational, motivating, et cetera. So, for example, we know that teens want the facts in our ads and are very interested in factual type data. And so, our ads provided scientific facts about the dangers of vaping in a way that teens can understand and that's meaningful to them.

From sample and focus groups with teens, we learned that they wanted to understand what was dangerous – what dangerous and toxic chemicals were actually in e-cigarettes and how that could impact them. Other promising areas in response to the question include social consequences such as disappointing themselves, their friends, their families. And then most – many teens today have actually close relationships with their parents, which may be, you know, somewhat different than previous generations. So, today's youth are actually concerned about maintaining that strong relationship.

And, you know, kind of ubiquitous right now is this concern and teens discussing mental health issues and stress. And of course, we know that nicotine addiction can be part of, you know, generating some of that stress. So, the loss of control is another point or another messaging place that has been very effective with teens because it's at a time in their life where they're really trying to exert control. And so, now we frame addiction as more of a loss of control. So, hopefully, there's some helpful information in there for folks that are looking to ideas for messaging to teens. Thank you.

Brittney Lee:

Thank you so much, April. Alright. The next question we have is about our curriculum. And there's a related question there. So, for Anne, we'll ask to you, is "The Real Cost" no longer a curriculum with lessons like it used to be? And on a related note, are there promotional items or giveaways that can be sent to us for events out in the field for you from our campaign, "The Real Cost"?

Anne Rancourt:

Thank you. Yes. Well, it's great to get questions like that, because it means that folks are thinking about how to take the message out into their communities, which is a very welcome thing to hear. So, thank you to those folks who submitted. So, "The Real Cost" has actually never been a curriculum per se with lessons. But, you might be thinking about CTP's Vaping

Education Resource Center, which has science-based, standards-mapped lessons for teachers that they can use to help students understand the dangers associated with vaping and nicotine addiction. So, we would definitely encourage you to check that out.

In addition, at that site, there are also materials for parents and for teens themselves in English and in Spanish. And the center also partners, as I mentioned, with the National Cancer Institute to provide youth with resources for quitting e-cigarettes at teens.smokefree.gov, which we would encourage you to check out. And if you are interested in educational materials for events, I know that is a popular question, check out our Tobacco Education Resource Library, where you'll find free print materials, like posters, infographics, and fact sheets that you can order or download for free. So, hopefully that helps. Thank you.

Brittney Lee:

Thanks so much, Anne. Yes, please go check out the resource library. Great materials for folks who are interested. Okay. So, we've received several questions about how CTP supports adults who smoke cigarettes. Here's a question for you, April. How is CTP supporting the cessation framework? And, on a related note, another question came in. How can I help my daughter overcome an addiction to electronic cigarettes?

April Brubach:

Well, I guess, first off, I'm really sorry about your daughter. Your daughter's health care provider is an essential partner in addressing this concern within your family. So, I just want to say that first. For "The Real Cost" campaign, we primarily focused on preventing youth from ever starting to use tobacco products. However, as Anne mentioned, we do have a long-standing partnership with the National Cancer Institute. So, teens who come to our website, who are already experiencing addiction, can visit, again, teens.smokefree.gov for cessation resources, such as the Vaping Reality Quiz and the Quit Plan Builder. So, there are some tools there. In addition, for parents and teachers, as Anne also mentioned, we have a Vaping Education Resource Center where you'll find helpful information about how to engage with your child on that topic.

And regarding how CTP supports the cessation framework, the center participated in the development of the recently issued 2024 HHS framework to support and accelerate smoking cessation. So, our education efforts are aligned with principles and goals of that framework. And some examples include that we're expanding our adult cessation education materials to include posters tailored for additional sub populations, who are experiencing smoking related health disparities, such as American Indian and Alaskan Natives, disabled persons, veterans, and adults who work in service occupations, that we're planning on launching this fall. These materials are also in addition to a suite of resources that we launched in 2022 for help – public health stakeholders that feature positive, motivational cessation education messages that are tailored for a range of audiences, including LGBTQI+, young adult smokers, and those who read in Spanish.

So, these posters direct audience to the CTP's everytrycounts.gov website, which features quitting tips, cessation text messaging programs, all sorts of – pointing to all sorts of resources, including providing plain language information about nicotine replacement therapies. And again, the center's Tobacco Education Resource Library has already been mentioned, but it's an

excellent source of free educational materials for local, state, and national partners to use as part of their cessation promotion efforts.

And additionally, we're continuing to build scientific knowledge. It's important through research to inform the development of educational strategies and approaches, including potential messaging on the topics of cessation, nicotine, and the relative risks of tobacco products. So, a lot going on in terms of research in that space. Thanks, Brittney.

Brittney Lee:

Thank you, April. Alright. The next question that we have received is how is CTP creating messaging different from adult – for adults than youth? Bao, I'll pass that over to you.

Bao Zarndt:

Thank you, Brittney. So, as mentioned in the presentation earlier, we follow a comprehensive science-based approach. And this is applicable for all of our messaging for both adults and also youth. As April just mentioned, we focus on prevention messaging for youth. When we think about adults, we also want to identify and address knowledge gaps. But the things that we also think about include prevention, cessation, and relative risk.

As April just mentioned, in 2018, CTP launched our first ever adult cigarette cessation effort called "Every Try Counts." And that has reached more than 45 million adults who smoke cigarettes. Building upon those learnings in "Every Try Counts," we are conducting formative research studies to help think about, you know, how adults perceive cessation, nicotine, and relative risk, particularly among those who are smoking and using tobacco products.

Included in this is research with health care providers. They are trusted channels for message delivery, particularly around topics with cessation and relative risk. And we want to better understand how health care providers perceive tobacco products, and how communication may be a challenge in this area. In August of last year, the NIH published a Notice of Funding Opportunity in collaboration with FDA. It's a cooperative agreement, called the Public Health Communication Messaging about the Continuum of Risk. And what it will do is utilize data to assess behavioral impact that the messaging about continuum risk for tobacco products may have on both intended, and also unintended, audiences.

And in April this year, CTP published a commentary in *Nature Medicine*, coauthored by our very own center Director, Dr. Brian King, that discusses considerations for health care providers when talking to adults about relative risks of different tobacco products. And so, in conjunction with this commentary, CTP has launched a new webpage aimed at educating the public about the relative risks of tobacco products. Thank you, Brittney.

Britnney Lee:

Thanks, Bao. And thank you all – to all who are continuing to ask questions. We are continuing to receive questions. We have several about what our public health partners at the state and local levels can do with limited resources. If she's back on the line, I think this will be a great question for Gem. Any suggestions on how to prioritize prevention messaging and cessation messaging with limited dollars?

Gem Benoza: Sure. Hopefully third time is a charm. Can you hear me? No?

Brittney Lee: It's a bit choppy again.

Gem Benoza: Okay.

Brittney Lee: April, do you mind –

Gem Benoza: I'm so sorry.

Brittney Lee: No worries, it happens.

April Brubach:

Yeah, sure. So, you're talking about prevention messaging and cessation messaging. I think the idea is to – whatever you're going to do, be very clear about the audience so that you can design an effective communication or education program. If you generalize to kind of the nation or your whole community, it'll be challenging to create meaningful messages that really motivate people. Because, you know, the notions they need to be – feel very relatable, believable, meaningful, you know, all these things. So, really understanding your audience and being clear about what motivates them and doing research to gain the insights.

You know, there's a lot out there now that you can look to as an example, you know, whether it be "The Real Cost," Truth Initiative, or other government or NGOs, or cessation campaigns like CDC *Tips from Former Smokers*, and many of these programs or advertising components are available, like via CDC's Media Campaign Resource Center, where organizations can license those ads for, you know, for use without incurring the costs involved in developing them.

So, I think, you know, the notion is, at least on an educational level, you may need to do, you know, kind of all things. But if you're going to do a campaign, the best return on investment is to have a clear audience and a clear set of objectives for that audience. Thank you, Brittney.

Brittney Lee:

Thank you. Okay. We are now going to take our last question. And the final question is, what are the future plans for "The Real Cost" campaign? Perfect question. April, I'm going to pass it back over to you.

April Brubach:

Okay. I will start with my thoughts that the plans for youth prevention via "The Real Cost" campaign here at CTP include continuing to analyze the national data sets to identify trends in tobacco product use among youth enabling us to promptly address youth tobacco education needs as they evolve. So, we will also continue to refine our approach placing messaging in the

very fragmented youth media market that Gem reviewed for us, to enhance the return on investment for our public health messages when they're in market.

And our campaign research and evaluation team continues to evolve and innovate our formative research and outcome evaluation methods. And Dr. Zarndt, who's on the call with us today, I'm sure could tell you more about that. So, Bao, would you like to share more about our future plans related to research and outcome evaluation?

Bao Zarndt:

Thank you, April. So, our plans for future research will continue to be theory-based and evidence-based. And part of that is also to continue to assess, you know, how our campaign is doing with the longitudinal cohort study that I had mentioned previously. And examining how that's affecting youth in terms of outcomes, beliefs, perceptions, beliefs, intentions, and tobacco product use. But, as we mentioned, because the campaign is delivered in a really dynamic, and a diverse digital environment, it's important for us to understand, you know, how are teens paying attention and processing and attending to our content in a really crowded digital space?

So, to that end, we're thinking through implementation evaluations. And to help us better understand, you know, how teens are aware and processing our diverse campaign content that Gem had mentioned. This includes, you know, audio, video, custom programs, and social content in a digital environment. We're also thinking through and pursuing, you know, other complementary approaches and methodologies in addition to our outcome evaluation research.

So, to get a better comprehensive understanding, you know, really think – have to think through the diverse methodologies. And so, in addition to the cohort studies, we have randomized control trials, user experience studies, integrative data analysis of large data sets, and of course, exploring digital metrics to help us better understand how can we best measure what our campaign is doing in a digital environment? So, a lot of, just I think, exciting things on the horizon for us. So, I will pass it over to Brittney.

Brittney Lee:

Exciting things, indeed. We are very happy to have had the opportunity to take questions, explore a little bit more about what we're planning to do, and seeing what's in the future for us. So, that ends our Q&A for today. But before we go, we wanted to just acknowledge that while we have a small number of people to talk about "The Real Cost," we're representing many, many other people who have been working on this effort over the past decade.

We want to thank FCB New York, Initiative, Kinesso, and KDH, who have been such a wonderful partners helping us with the initial campaign development and launch in 2014. They've also helped us evolve the effort over the past 10 years. And as Bao mentioned already, RTI has been involved with evaluation since 2014. And finally, we want to thank the many staff here at CTP who have worked on campaign development and implementation, research and evaluation, and the wonderful support staff who assist our work in so many ways. We wish that we can name everyone individually, but we definitely need more than an hour.

We want to acknowledge Allison, Emily, and Ashley Roberts, and Sarah Reichle, who have done a tremendous job in planning and coordinating this webinar today. Finally, a big thank you to all for your time today. We greatly appreciate your interest and helping youth stay nicotine free.

As we noted earlier, a recording of this webinar will be posted to CTP's website in the coming weeks. If we were not able to answer your question today, remember that you can always contact us and give us your feedback, ideas, or any other questions at therealcost@fda.hhs.gov. That's it for today and have a great rest of your week. Thank you.

[end of transcript]