As youth e-cigarette use skyrocketed and threatened to undo decades of progress in reducing youth tobacco use, on September 10, 2019, Bloomberg Philanthropies launched a major new initiative to end the youth e-cigarette epidemic. The very next day, in response to new data showing that youth e-cigarette use had reached record levels, the Trump Administration announced on September 11, 2019, that it planned to clear the market of flavored e-cigarettes, a promise that it walked back on January 2, 2020 when it announced that it would exempt several categories of flavored e-cigarette products.

New data released this week demonstrate the impact of these actions and the actions taken by others. According to the National Youth Tobacco Survey (NYTS), released by the U.S. Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA), among high school students, e-cigarette use declined to 19.6% in 2020, after increasing by 135% from 2017 to 2019 (from 11.7% to 27.5%).

Despite the decline, e-cigarette use among U.S. youth remains at epidemic levels, driven in large part by a dramatic increase in the use and sale of menthol e-cigarettes and disposable e-cigarettes, two categories of products that were exempted from the Trump Administration’s policy on flavored e-cigarettes earlier this year. While the decline in youth e-cigarette use shows meaningful progress, the new data reflect an historic missed opportunity to adopt the clear measures that could have driven down youth e-cigarette use rates to a far lower level and set our nation on a course to permanently reverse the youth e-cigarette epidemic.

The drop in youth e-cigarette use is driven by a number of factors, including new public education and cessation efforts as well as the remarkable progress, particularly at the state and local level, that has been made in the last year in prohibiting flavored e-cigarette use.

This report comes at a time when we are at a cross roads. What happens in the next twelve months may well determine whether the youth e-cigarette epidemic turns into a public health problem that we are dealing with for decades to come.

As the result of the September 9 deadline for e-cigarette companies to submit applications to the FDA to keep their products on the market, the decisions FDA makes will determine whether e-cigarette manufacturers will be allowed to continue to prey on our nation’s youth with flavored, highly addictive products or whether FDA and the Administration use this process to stop the sale of flavored and high-nicotine products that have fueled the current epidemic.

Over the last twelve months states and localities have taken the lead, along with the U.S. House of Representatives, to address the youth e-cigarette epidemic and ban the sale of flavored e-cigarettes. In the absence of effective federal action, states and localities covering 25% of the American public (including 24% of U.S. youth) have enacted laws prohibiting or strictly limiting the sale of all flavored e-
cigarettes. The new data demonstrate that it will be critical for cities and states to build on the momentum created over the last year.

**State and Local Progress in Eliminating Flavored E-Cigarettes**

Since the September 10, 2019 announcement by Bloomberg Philanthropies that it was launching a major new initiative to end the youth epidemic, “Protect Kids: Fight Flavored E-Cigarettes,” a growing number of states and cities taking action to crack down on the sale of flavored e-cigarettes. In the project’s first year, major policy victories were achieved in five states and multiple localities, most recently in Chicago, IL. Significant progress was also made at the federal level.

As a result of this policy success, **81.4 million Americans (25% of the population), including over 17.7 million youth under 18 (24.2% of all U.S. youth) live in states or cities that prohibit or strictly limit the sale of flavored e-cigarettes.** Before launch of the Bloomberg initiative, about 9.6 million Americans (3% of the population) lived in localities that prohibited or restricted the sale of flavored e-cigarettes, and no state had enacted such policies. **Laws passed during the first year of the Bloomberg grant covered an additional 71.7 million Americans.**

Key successes since September 10, 2019:

- **Five states** have banned the sale of flavored e-cigarettes.
  - On November 27, 2019, **Massachusetts** became the first state to adopt a ban on the sale of flavored e-cigarettes. Massachusetts’ law prohibits the sale of all flavored tobacco products, including menthol cigarettes. 6.9 million Massachusetts residents, including over 1.3 million youth are covered by this law. Independently, Boston had previously enacted its own restriction on the sale of all flavored tobacco products.
  - On January 21, 2020, **New Jersey** adopted a law banning the sale of all flavored e-cigarettes. 8.9 million New Jersey residents, including over 1.9 million youth are covered by this law.
  - On March 26, 2020, **Rhode Island** Governor Raimondo ended the sale of flavored e-cigarettes by making permanent an emergency regulation enacted in 2019. The new policy protects over 1 million Rhode Island residents, including over 205,000 youth. Earlier, Rhode Island had issued a temporary emergency prohibition on the sale of flavored e-cigarettes.
  - On April 2, 2020, the **New York** Legislature and Governor Cuomo agreed on a state budget package that included a ban on the sale of all flavored e-cigarettes. 19.5 million New Yorkers, including 4 million youth, are covered by this law. New York statewide action follows even stronger action taken by New York City, which banned the sale of flavored e-cigarettes in November 2019.
  - On August 28, 2020, **California** became the second state to adopt a law banning the sale of both flavored e-cigarettes and menthol cigarettes. This law will cover 39.5 million Californians, including nearly 9 million youth. California is home to more than 10% of the U.S. population.
    - Prior to passage of the statewide law, major policy victories also occurred in multiple California cities over the year. For example, in May 2020, Los Angeles County
implemented its ban on the sale of flavored e-cigarettes and other flavored tobacco products. Also in May, Oakland strengthened its law to prohibit most sales of flavored tobacco products by removing the exemption for adult-only tobacco stores.

- Over 80 California communities have now limited or banned the sale of flavored e-cigarettes.

- The pace of change at the city level is also growing outside of California and Massachusetts:
  - Five Colorado communities have prohibited the sale of flavored e-cigarettes.
  - Twelve Minnesota communities have prohibited or greatly restricted the sale of flavored e-cigarettes.
  - Philadelphia, PA, restricted the sale of flavored e-cigarettes.

- On September 9, 2020, the Chicago City Council overwhelmingly approved an ordinance banning the sale of all flavored e-cigarettes. Approximately 2.7 million Chicago residents, including over 571,000 youth, are covered by this law.

- In the fall of 2019, eight states – Massachusetts, Michigan, Montana, New York, Oregon, Rhode Island, Utah and Washington – issued emergency rules to suspend the sale of flavored e-cigarettes in response to skyrocketing youth use and the outbreak of vaping-related lung injuries (called EVALI). The orders took effect in Washington State, Massachusetts, Rhode Island and Montana. The Michigan, New York, Oregon and Utah orders were blocked as a result of legal challenges. In Michigan, an effort is underway to make the emergency rule permanent. Washington State’s emergency order expired in February 2020 and Montana’s expired in April 2020.

Momentum for this important policy is building across the country. Many states – from Illinois to Maryland to Minnesota and Vermont – considered restricting the sale of flavored e-cigarettes and other flavored tobacco products in 2020.

**Progress at the Federal level**

While the White House announcement on September 11, 2019 provided reason for hope that the federal government would act decisively, over the past year, progress at the federal level has been uneven. While the U.S. House of Representatives took unprecedented action, the Trump Administration broke its promise to clear the market of flavored e-cigarettes and failed to take the type decisive action needed.

- In September 2019, to address the growing epidemic of youth e-cigarette use, a bipartisan group of U.S. lawmakers launched the Congressional Caucus to End the Youth Vaping Epidemic. The coalition launched with 52 original members and is co-chaired by Rep. Raja Krishnamoorthi (D-IL), Rep. Peter King (R-NY), and Senator Dick Durbin (D-IL). Since its inception, it has served as an important forum for speaking out about the youth e-cigarette epidemic and the Administration’s failure to take strong action.

- In February 2020, the U.S. House of Representatives passed the most comprehensive tobacco prevention legislation since the 2009 Family Smoking Prevention and Tobacco Control Act. The Protecting American Lungs and Reversing the Youth Tobacco Epidemic Act (H.R. 2339) would
prohibit the sale of flavored tobacco products, including flavored e-cigarettes, flavored cigars and menthol cigarettes, in addition to implementing other public health measures aimed at curbing youth tobacco use. By prohibiting all flavored tobacco products, H.R. 2339 would have a powerful impact in reducing both youth nicotine addiction and tobacco-related health disparities. This bill is supported by over 75 public health, medical, education, parent, civil rights and other organizations. It was supported by over three-quarters of the members of the Congressional Black Caucus. While the Senate has yet to take action, House passage of H.R. 2339 sets the stage for future efforts.

These Congressional efforts are critically important due to the failure of the Trump Administration and the FDA to take the action needed to protect kids.

The Administration Broke Its Promise and Missed an Opportunity to Make Greater Progress and Protect Kids from the E-Cigarette Industry

On September 11, 2019, the Trump Administration announced that it planned to clear the market of flavored e-cigarettes. However, the final e-cigarette policy announced by the Administration on January 2, 2020, broke this promise and instead left thousands of flavored e-cigarettes widely available. The Administration’s policy restricted flavors (except for tobacco and menthol flavors) in cartridge-based e-cigarettes, but left countless flavored e-cigarette products on the market. Flavored e-cigarette products that remain on the market and accessible to youth include:

- Disposable flavored e-cigarettes like Puff Bar, Mojo, and Stig, that come in a wide array of kid-friendly flavors, including cotton candy, iced apple mango, strawberry, and mint;
- 15,000+ flavored e-liquids in every imaginable kid-friendly flavor like chocolate donut, cotton candy and s’mores, and in varying nicotine strengths;
- Popular open systems, including refillable Juul-compatible pods, and Smok and Suorin, which have no restrictions on what flavors can be sold and are popular among youth; and
- Menthol varieties of Juul and other cartridge-based e-cigarettes.

The Administration’s policy did not do enough to curb the youth vaping epidemic.

Two new studies published this week clearly show that the Administration missed the opportunity to make far greater progress and instead set the stage for kids to move to disposable products and
menthol flavored e-cigarettes. E-cigarette sales data show that flavored e-cigarettes continue to account for the majority of total e-cigarette sales. Data on youth use from the 2020 National Youth Tobacco Survey (NYTS) show that the large majority of youth e-cigarette users use flavored e-cigarettes. According to the NYTS, from 2019 to 2020, the proportion of current youth e-cigarette users using flavored e-cigarettes increased by 20%, from 68.8% to 82.9%. Nearly 3 million youth use flavored e-cigarettes.

Sales and use are being driven by a dramatic increase in the sale of disposable e-cigarettes and menthol e-cigarettes, two categories of products exempted from the Trump Administration’s policy on flavored cigarettes. The new study on e-cigarette sales shows that since sales of mint and other flavored, cartridge-based products were restricted, there was a significant increase in the sale of menthol e-cigarettes. The increase largely occurred after Juul ended sales of its mint cartridges in November 2019 and after the FDA implemented its new policy prohibiting sales of flavored cartridge products except for menthol in February 2020.

- As of May 2020, menthol-flavored products account for more than half (51.6%) of total e-cigarette sales, an increase from 11.4% in August 2019.
- From August 2019 to May 2020, the proportion of pre-filled cartridge sales that were menthol increased dramatically from 10.7% to 61.8%, while sales of mint-flavored cartridges fell from 47.6% to 0.3%.
Among high school students who currently used any type of flavored e-cigarettes, 37% used menthol flavors (920,000). Use of menthol flavors was highest (44.5%) among high school e-cigarette users who primarily used e-cigarettes with prefilled pods or cartridges, like Juul.\textsuperscript{8}

The data released this week also show a dramatic increase in the sale and use of flavored disposable e-cigarettes.

- The proportion of total sales that were disposable devices nearly doubled between August 2019 and May 2020, from 10.3% to 19.8%.

- According to the 2020 NYTS, from 2019 to 2020, disposable e-cigarette use increased by an alarming 1,000% (from 2.4% to 26.5%) among high school current e-cigarette users and by 400%...
(from 3.0% to 15.2%) among middle school current e-cigarette users. 870,000 youth are current users of disposable e-cigarettes.

Taken together, the results of these two studies demonstrate how quickly kids will shift to whatever flavored e-cigarettes are left on the market. Once certain flavored products were removed from the market, kids quickly migrated to the flavored products that were still available. Rather than playing whack-a-mole with a handful of egregious products only after they become popular with our nation’s kids, the FDA should clear the market of all flavored e-cigarettes.

The new studies confirm previous reports from tobacco industry analysts and the press.

A May 2020 industry analyst report noted, “We expect brands in the disposable e-cig segment to continue to gain market share as long as they are not covered by the FDA’s restriction on non-tobacco/non-menthol flavor variants.”


- “Students were telling me that everybody had gone to Puff Bars, which are disposable,” said Lauren W. Williams, a teacher at McCracken, near Paducah, KY.
- “It’s rampant,” Kristina Rodgers, the principal of Roosevelt High School in Seattle, said of the rising use of disposable vaping devices.
- “Puff came out as the new popular thing that every single kid was doing and I hopped on that fad,” she explained. “They have flavors like the Juul flavors.
- Bennett Kelly, a high school senior from Costa Mesa, Calif. has also switched to Puff Bar. “They have the best flavoring,” he said. “They have the most nicotine content.”
In July 2020, the FDA issued warning letters to three disposable e-cigarette companies, including Puff Bar, notifying them to remove their flavored disposable e-cigarettes from the market. However, this step was limited because it only applied to a small number of products and it is unclear whether FDA has taken action to ensure that even those products were removed from the market.

Data and experience show that the progress to date is fragile and can quickly be reversed. Urgent action is needed to eliminate all flavored e-cigarettes, including the menthol products and cheap disposable e-cigarettes to which kids have rapidly migrated.

**Youth E-Cigarette Use Is an Epidemic**

Youth e-cigarette use in the United States continues to be a public health crisis. As noted previously, while new data released this week shows that in 2020 e-cigarette use has decreased among U.S. youth, it remains at epidemic levels. According to the 2020 NYTS, as of the middle of March 2020 when schools closed because of the COVID-19 crisis, 19.6% of high school students and 4.7% of middle school students (3.6 million youth) are current e-cigarette users. This decline follows unprecedented increases in e-cigarette use in recent years. In the past year, data was released from three national surveys, all finding that youth e-cigarette use increased dramatically between 2017 and 2019. The 2019 National Youth Tobacco Survey found that e-cigarette use among high school students more than doubled from 2017 to 2019, to 27.5% of students, or more than 1 in 4 high schoolers. Among middle schoolers, e-cigarette use more than tripled from 2017 to 2019, increasing from 3.3% to 10.5%.

The number of youth using e-cigarettes is alarming and youth who are using e-cigarettes are not just experimenting but are using these products frequently. Many are becoming rapidly and seriously addicted. The proportion of youth who are using e-cigarettes frequently has steadily increased over the past several years. In 2020, nearly 40% of high school and 20% of middle school e-cigarette users reported frequent use (on at least 20 days a month), a strong sign of addiction. Over 730,000 middle and high school students used e-cigarettes every single day.
Flavored E-Cigarettes Have Fueled the Popularity of These Products Among Kids

The cause of this youth addiction crisis couldn’t be clearer: E-cigarette makers have lured kids with appealing flavors and hooked them with massive doses of nicotine.

- Research shows that flavors play a key role in youth use of tobacco products, including e-cigarettes. More than eight in ten youth e-cigarette users (82.9%) use flavored e-cigarettes. 70% of current youth e-cigarette users say they use e-cigarettes “because they come in flavors I like.” There are more than 15,000 unique e-cigarette flavors on the market, including flavors like gummy bear, cotton candy, cherry crush and many others that clearly appeal to kids.

- Some e-cigarette devices deliver potent doses of nicotine in a manner that masks its risks and leads to rapid, intense addiction. Juul and other e-cigarettes deliver as much, if not more, nicotine as a whole pack of 20 cigarettes.

- E-cigarettes are packaged as sleek, high-tech devices, enabling youth to use them without being discovered by parents or teachers. Kids who would never consider smoking perceive them as cool and risk-free.

- E-cigarettes are marketed on social media sites popular with kids using themes and images used so successfully by the cigarette industry for decades.

E-cigarettes pose serious threats to the health of our kids. According to a recent CDC report, “Nicotine is highly addictive, can harm the developing adolescent brain, and can prime the brain for addiction to
other drugs. In addition, a growing body of scientific literature suggests that youths who use e-cigarettes are more likely to smoke conventional cigarettes in the future.”

**The Next 12 to 24 Months are Critical: The Continuing Severity of the Problem Demands Strong, Decisive Action to Reverse the Youth E-Cigarette Epidemic**

E-cigarettes are addicting a new generation of kids and threaten to reverse decades of progress in reducing youth tobacco use. It is clear that the youth e-cigarette epidemic is a public health crisis that must be addressed. The solution to this crisis is also clear: Policymakers at all levels must eliminate the flavored products that are luring and addicting our kids.

Since the Trump Administration failed to clear the market of flavored e-cigarettes and left thousands of flavored products for sale, youth are at risk.

- 19.6% of high school students and 4.7% of middle school students (3.6 million youth) are current e-cigarette users. Nearly 40% of high school e-cigarette users and 20% of middle school e-cigarette users are vaping at least 20 days a month. Over 730,000 middle and high school students are vaping every single day.\(^{22}\)

- Flavored e-cigarettes continue to account for the majority of total e-cigarette sales.\(^{23}\) 83% of current youth e-cigarette users use flavored products.\(^{24}\)

- The market share of disposable e-cigarette devices has grown considerably, nearly doubling from August 2019 to May 2020, from 10.3% to 19.8%.\(^{25}\)

- The 2020 NYTS found that from 2019 to 2020, disposable e-cigarette use increased an alarming 1000% (from 2.4% to 26.5%) among high school students and 400% (from 3.0% to 15.2%) among middle school students.\(^{26}\)

- As of May 2020, menthol flavored products now account for more than half (51.6%) of total e-cigarette sales, an increase from 11.4% in August 2019.\(^{27}\)

- 37% of high school e-cigarette users use menthol products.\(^{28}\)

Further, as the nation continues to combat the coronavirus (COVID-19), it has never been more important to take every measure possible to keep our lungs healthy. This means we need to do everything we can to prevent kids from ever starting to use tobacco products, including e-cigarettes. The harmful impact of smoking on the lungs is well-documented, and there is growing evidence that e-cigarette use (vaping) can also harm lung health.\(^{29}\) Dr. Nora Volkow, director of the National Institute on Drug Abuse, has stated that “emerging evidence suggests that exposure to aerosols from e-cigarettes harms the cells of the lung and diminishes the ability to respond to infection.”\(^{30}\) A recent study, highlighted in *The New York Times*, found that young people who vape are significantly more likely to be diagnosed with COVID-19.\(^{31}\)
Only the elimination of all flavored e-cigarettes can reverse skyrocketing youth use and prevent e-cigarettes from addicting a new generation of kids. Action is needed by all levels of government.

- States and local governments have been forced to lead because of the failure of the federal government to act decisively. States and cities need to continue their growing efforts to prohibit the sale of all flavored e-cigarettes and other flavored tobacco products. As long as some flavored e-cigarettes remain available, kids will migrate to them and we will not solve this youth addiction crisis.

- FDA needs to use the new product application process to stop the sale of flavored and high-nicotine products that have fueled the current epidemic. The decisions the FDA makes on the applications e-cigarette manufacturers are required to submit by September 9 will determine whether these manufacturers will be allowed to continue to prey on our nation’s youth or whether the FDA and the Administration will finally stop the sale of flavored and high-nicotine products that have fueled the current epidemic.

To carry out its public health mission, in assessing these applications FDA must apply five straightforward criteria:

1. **The FDA should not authorize any new product that will lead youth or other non-tobacco users to initiate use of the product.** Based on the U.S. experience with e-cigarettes, no flavored e-cigarettes, including menthol-flavored products, can meet this test.

2. **The FDA must require manufacturers to provide evidence that the product does not deliver nicotine at levels that increase the risk of abuse and addiction among youth,** such as has occurred with Juul and products that deliver similar levels of nicotine.

3. **The FDA must require that e-cigarette makers prove a product will predominantly be used by smokers who would otherwise continue smoking and that they will switch completely to the new product.**

4. **Given the disproportionate burden of tobacco on vulnerable populations, FDA must require the submission of data to allow an assessment of the product on those populations.**

5. **E-cigarette manufacturers must also demonstrate that using the product is significantly less harmful than using other tobacco products.**

In sum, **these products need to reduce the harm of cigarette smoking, not cause new harm or lead to more people becoming addicted to nicotine or fewer people quitting.**

Until the FDA takes meaningful action, Congress, states and cities should step up their efforts to prohibit the sale of flavored e-cigarettes and other flavored tobacco products.


