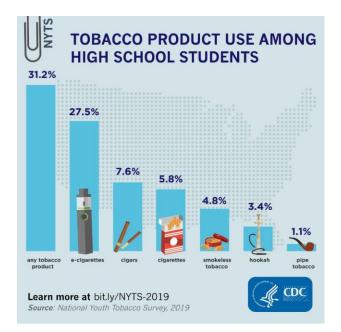
Vaping Addiction in Teens and Young Adults

Within the past decade, vaping has become an epidemic amongst young adults and teenagers. This is a major public health issue that has steadily been growing since the initial creation of e-cigarettes originally as a safer alternative to traditional cigarettes. These e-cigarettes and vape pens have massively gained popularity since then and especially amongst certain demographics such as young adults and teenagers. Despite efforts to stunt this growth in popularity amongst teens and young adults such as raising the minimum age to 21, the problem persists. Due to the ease of accessibility through loopholes, high nicotine percentages of the vapes themselves, and the aggressive marketing strategies of vape brands on social media nicotine addiction through vaping is still plagues the younger generation. Regulating and enforcing nicotine content is a necessary step to reduce nicotine dependency and promote overall public health amongst the younger generation.

The urgency of this issue cannot be understated. Recent studies as well as public health reports support this urgency of addressing the vaping epidemic in teens and young adults. Studies also show that social media marketing plays a significant role in influencing young adults and teens perception of vaping and normalizes vaping in general calling for a need to regulate the marketing of these products. More research has also shown that there is a concerning lack of enforcement of age restrictions as well as improper labelling of nicotine percentages of vape products. Underage purchases are an obvious contributor to the overall problem but the mislabeling of percentages is equally as important as it contributes to how fast addiction takes place and drastically increases the difficulty of quitting. This issue is also reflected in national data found through extensive research. The chart below showcases the dominance of vaping and e-cigarettes compared to other tobacco products amongst high school students.

Figure 1

Tobacco product use among high school students in 2019.



Note. Data from the National Youth Tobacco Survey. Centers for Disease Control and Prevention. (2019). Tobacco product use among high school students — United States, 2019. <u>https://bit.ly/NYTS-2019</u>

As mentioned, social influence is a large contributor to the problem, particularly through social media which has predominantly a younger user demographic. Research by Vogel et al. (2024) discovered that influencers who were pro vaping and posted pro vaping content on Instagram increased the susceptibility of vaping in these impressionable demographics. Even when these influencers include nicotine warnings in their posts the study found that it only made their audience see them as "authentic" and "more trustworthy". This goes to show how influential these influencers are and how despite warning labels the issue still persists calling for more serious restrictions and regulations. The use of these unorthodox marketing platforms proves to be very effective marketing strategies for vaping companies to reach younger

audiences. This is only one part of the problem though as vaping can be seen as cool and trendy but that means nothing if they aren't easily accessible which sadly is not the case.

Along with the aggressive and arguably unethical marketing practices the ease of access of vapes through retail loopholes is also majorly at fault here. The Substance Abuse and Mental Health Services Administration (SAMHSA, 2020) stated that nearly a third of teenagers were able to purchase nicotine vapes from in person vape shops, online vape retailers, and common stores like gas stations despite being clearly underage. SAMHSA also found that many of these retailers falsely reported the accurate nicotine percentages of their products with some reaching an absurd 172% nicotine. For reference, 5% is commonly found in vapes, particularly disposables, and it is even argued to be too much as 5% or 50 mg of nicotine is the equivalent to about two packs of cigarettes. This failure to enforce age restrictions and communicate accurate nicotine percentages whether intentional or not is a major contributor to the overall problem.

One solution to the overall problem would be to combat the unethical and overly aggressive marketing tactics used on social media. This can be done through regulation on the marketing of the products especially on social media platforms. More specifically age gating the content would be very effective in this instance. Another regulation could be requiring the use of government approved warning labels on all vaping centered marketing content used on social media platforms.

Government regulation on marketing content for these companies has numerous benefits. For one, age gating would effectively ban the viewing of such content until the user surpasses the age of 21 at least within the United States. As Vogel et al. (2024) explained, exposure to provaping content can significantly increase a young person's susceptibility to vaping. Therefor by age gating this type of marketing content removing a majority of the young adult and entirety of teenager demographics it should reduce their susceptibility to vaping and e-cigarette usage. It will furthermore reduce the overall youth exposure as well as normalization and glamorizing of vaping as many will not have access to the content. Adding warning labels can also have their benefits also as Vogel et al. (2024) found that when participants viewed vaping-related posts containing both a nicotine warning label and a link to cessation resources, they were significantly less likely to be susceptible to product use.

Although there are clear benefits of government regulation on social media vape marketing they too come with some drawbacks. One of these drawbacks is enforcement of these new regulations. Regulating social media platforms is a difficult task that often involves a lot of work from both the regulating body as well as the social media platform itself. Even if regulated properly some influencers could potentially find loopholes to work around these regulations. For instance, an influencer could be posting from a less regulated country or use a VPN to have the same effect. This makes it very difficult for the regulating body and social media companies to successfully enforce regulations. Along with that, the tobacco industry is notorious for fighting back against any sort of regulation either through political lobbying or other means. These companies would lose a lot of money through this regulation and will effectively sever them from a profitable demographic they have been relying on. Despite these drawbacks, the potential public health benefits of implementing these marketing regulations heavily outweigh the drawbacks.

In addition to marketing regulations, regulating the nicotine content in vapes as well as enforcing the current federal age restrictions would prove to be effective solutions and have many benefits to the overall issue of youth and young adult addiction. As mentioned earlier many vapes have a substantial and sometimes ludicrous amount of nicotine within them. Many popular disposable vapes are around 5% nicotine or more which is equivalent to a one to two packs of cigarettes within a single pod alone. Some even contain far more than that as SAMHSA (2020) reported discrepancies as high as 172%. These high percentages make it easier to get heavily addicted to nicotine at a fast pace as well as increase the difficulty of quitting. Implementation of some sort of federal nicotine percentage limit to potentially 2% like the UK has could help exponentially limit the addictive qualities of nicotine and maybe even help those addicted to higher percentages to quit. Equally important is the need to close retail loopholes by enforcing existing federal age restrictions on tobacco. Despite the federal law within the United States being 21 for tobacco usage, many teenagers are still able to easily acquire vapes through retailers such as vape shops and convenience stores. Having the ATF play a larger role in enforcing this law could help close this retail loophole and crack down on venders who ignore this law. Altogether, these solutions can both restrict the accessibility of vapes as well as reduce the effectiveness of the nicotine within them.

Despite there being many benefits to these solutions there will too be many challenges. Similarly to regulating marketing, big tobacco companies will fight tooth and nail to stop the regulation of nicotine percentages as it will effect their overall profit. Nicotine is obviously an addictive chemical and the more their customers are addicted the more money they make. Regulating the percentages of vapes could also inadvertently lead to an underground market for higher percentage vape juices or disposables for those who are willing to put in the extra effort. This would most likely be a small percentage of users who would go that route though as it would require extra steps and more money. Enforcing the federal age limit would too come with its difficulties. One issue is the effective enforcement with online retailers as its easier to use fake IDs and take advantage of their weak age verification systems. One can just use their parents or older siblings ID to purchase online making some loopholes harder to close than others. The overall enforcement would also require a substantial amount of resources from the ATF. This would potentially require more staffing, funding, and coordination across the country with most likely the formation of a tobacco enforcement taskforce to be effective. Still with these challenges in mind, the benefits of these solutions still make it worth the effort to implement.

In conclusion, vaping addiction in teens and young adults is an urgent public health issue driven by aggressive marketing, retail loopholes, and high nicotine percentages. Despite the challenges, the proposed solutions of regulation of vape marketing, nicotine percentage regulation, and enforcement of federal age restrictions offer a practical and effective path forward to solving the overall problem. These solutions reduce the appeal, accessibility, and effectiveness of nicotine addiction addressing many root causes of the issue which will in turn lead to less nicotine dependency and a better overall public health for young adults and teenagers.

Annotated Bibliography

Centers for Disease Control and Prevention. (2019). *Tobacco product use among high school students*. National Youth Tobacco Survey. <u>https://bit.ly/NYTS-2019</u>

This source provides national survey data from 2019, showing that vapes were the most. commonly used tobacco product among high school students. The visual chart from this report is used in the essay to show how dominant vapes are over other forms of tobacco use.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2020). *Reducing vaping among youth and young adults* (Publication No. PEP20-06-01-003). U.S. Department of Health and Human Services.

https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-06-01-003_508.pdf

This government report outlines the dangers of youth vaping and offers national-level data, health impacts, and prevention strategies. It is cited in the essay to support claims about high nicotine concentrations in vapes, enforcement loopholes, and policy recommendations. The report also informs the solution to regulate nicotine percentages and enforce federal age restrictions.

- Vogel, E. A., Unger, J. B., Vassey, J., & Barrington-Trimis, J. L. (2024). Effects of a nicotine warning label and vaping cessation resources on young adults' perceptions of provaping Instagram influencer posts. Addictive Behaviors, 149, 107888. <u>https://doi.org/10.1016/j.addbeh.2023.107888</u>
- This journal article investigates how young adults respond to influencer based vape marketing on Instagram. It is used in the essay to support the idea that social media plays a major role in youth susceptibility to vaping and that marketing regulation is necessary. The study also shows the effectiveness of warning labels reinforcing one of my proposed solutions.