

Teen Vaping: A Generational Epidemic?

Karla Jurvetson, a Bay Area psychiatrist, recalls the time she first heard about the idea behind the Juul company. Through business connections, she had been invited to a holiday party in December of 2013. Also at this party was James Monsees, a local business entrepreneur. He began to talk about the idea behind his business referred to as Juul Labs (at the time called Ploom), a company specializing in electronic cigarettes that claims to help users get off regular tobacco cigarettes. Monsees bragged about how successful his company would be and the intent to secretly market towards teens, which Jurvetson immediately found very disingenuous. She became extremely upset and challenged him that he was planning to profit off of getting people addicted, especially minors, breaking the decorum of a formal dinner to express her true concerns. Soon after, Monsees mentioned the incident in an article written by The San Francisco Chronicle, claiming that after presenting the idea at a dinner party “a handful of the other guests booed the statement”. In spite of the clearly negative social response to his plan, today Juul labs has reached a value of \$38 billion, higher than Airbnb or SpaceX.

To learn more about why the topic concerns people, we have to first take a look at what a Juul actually is. Electronic cigarettes contain nicotine vapor, which the user inhales through the end, blowing out a puff of vaporized liquid that appears similar to smoke. The devices are often sleekly and fashionably designed, which is particularly attractive to teens. One teenager, whose name will be withheld for the purpose of anonymity, explained it as “very portable, very discreet, [and] there’s not a strong smell

to it. I would say it's like the size of a USB stick." It also comes in many flavors and preferences to choose from: mango, mint, cucumber, etc. Juuls do not contain the same amount other chemicals as a normal cigarette, but have been proven to be much more addictive as they contain about the same amount of nicotine as an entire pack of cigarettes ("Where Are Kids Getting JUUL?").

When the traditional cigarette first gained its popularity, it was a glamorous pastime, but the public had little knowledge of its harmful effects. Especially in the 1950's-70's, smoking was a large part of the media and culture of America. It could be largely seen in advertisements and television, and smoke breaks or enjoying a cigarette at social gatherings became a norm. In fact, about 42% of Americans were hooked in the 60's, according to a 2011 PRB study. Over the next few decades, people began to be more informed about the issues that came along with smoking tobacco cigarettes as more studies emerged. Although there had been a few small studies done decades earlier, it wasn't until the 50's that more larger-scale studies illustrated the possible health effects. These proved lung cancer had grown to its highest rate and was the most common type of cancer among American men, with a direct link to cigarette smoking.

This timeline gives some insight into why most people who have continued cigarette habits are from an older generation. It motivated many companies, such as Juul Labs, to take the opportunity to advertise the e-cigarette as a way to continue nicotine usage without chemicals that could lead to lung cancer and other conditions. One of the company's slogan is "Make the Switch," which is prominently displayed on

their website, or in many other forms of their marketing. They have additionally released videos titled “Pat” and “Carolyn” documenting the the experiences of the two ex-smokers who made the switch to their product and how it benefited their lives. Although it was initially marketed under this label, the outcome proved to be very different and resulted in widespread teen consumption.

Most teenagers of the current generation are aware of the commonality of vaping and the significant place it has in their culture and daily life. However, not all adults or even medical professionals are actually aware of the extent of the topic because they have not personally experienced it. About 25.7% of teens reportedly vape or have vaped, according to a 2019 survey from *Safety and Health Magazine*. It usually occurs on-campus, in cars, or during social gatherings where people feel they are less likely to be caught. According to a 2018 Truth Initiative study, teens are generally acquiring them through people over the age of 21, with fake IDs, or online with the benefit of loose age verification (“Where Are Kids Getting JUUL?”). Michelle Parsons, a high school outsider who has witnessed the issue says “From what people have told me, it’s really to bypass the age restrictions. And if they’re buying it off a credit card of someone who’s over the age of 21, it shouldn’t be much of an issue. There’s not much age verification online.”

Social media has also had a huge influence on the problem, both on a larger scale and in smaller communities. The original advertising method for Juul was through social media platforms; using both their own accounts and those of influencers to

promote the product. This means paying a high-status figure to be using Juul in their photos or videos to spread the word about it towards their audience (which as we know when referring to social media, is mostly teens). Parsons also spoke about the effect social media had on Juuling. She continues, “I think like a lot of things in pop culture, one person does it and then it kind of trickles down into a lot of people wanting to use it.” Many people also started to realize what the company was doing and brought it to the attention of the public that they were covertly advertising towards minors.

The Juul company took an interesting stance in response to this. First, they deleted their entire Instagram account, and stopped paying influencers to be seen using them. Then, they posted a reaction to their website in March of 2019 that claimed their support of “Tobacco 21”, which was the law proposed to move the eligible age for these products from 18 to 21. It states, “While raising the legal age to purchase tobacco products to 21 is not the only strategy for reducing underage use, we believe it is critical because it will prevent high-school seniors and recent high-school graduates from purchasing tobacco products and sharing them with underage users. We know that “social sourcing”—obtaining tobacco products from friends or siblings who are of legal age—is currently how a large swath of youth users access these products”. Many people would actually disagree with these claims and argue that the variety of flavors and looks stated earlier would argue the point that the company actually feels the opposite as it is benefitting them economically in the long run.

There are several health hazards that accompany vaping that doctors are concerned about for the teenage population, such as damage of the lungs, heart, and brain. First of all, nicotine causes an increase of blood pressure along with the adrenaline that it provides. This increases the chance of a heart attacks, stroke, and several other heart complications. In terms of lungs, there a high likelihood of inflammation in the airways, sometimes informally referred to as “popcorn lung”. The real name for this is bronchiolitis obliterans. It creates scars on the lungs and can result in wheezing, shortness of breath, and fatigue. Being reliant on a drug such as nicotine also causes many problems once it is taken away, also known as going through withdrawal. This can include a strong desire or craving for the drug, intense mood swings, headaches, and abdominal pain (“How Vaping Could Cause a Condition”).

Another anonymous teen claimed, “I would describe it as a craving because you literally crave it like it’s a necessity. If you go long enough without it, it’s like going long enough without water, sleep, or food. Like things that you need to survive.” From a more medical standpoint, Jurvetson says, “Dopamine is something that is meant to keep us alive because it makes us hungry... we feel good after we eat. It’s a very basic reward cycle. The main chemical that’s associated with gambling, or any addiction that people have a hard time stopping, that they crave”. If this isn’t enough, getting started with vaping as a first-time nicotine user increases the chance of using other tobacco products down the road; these have a high link to cardiovascular disease and cancer. The largest part, however, is simply the fear of the unknown. Many of the chemicals found in vape

products (such as propylene glycol and vegetable glycerin) haven't been tested yet and could have later complications.

These various results give some insight into why this is a growing concern overlooking the youth population. Although it's easy to focus on all of the negatives, it's not impossible to reach an ending point. We need to collectively look into this issue and start educating teens, parents, and schools about the dangers that come along with the popular pastime. As Jurvetson puts it, "I think the main thing would be to develop a plan to stop vaping, and stop Juuling... as far as looking into the future, this is a whole generation of kids that could potentially be addicted to nicotine, and have really bad health effects that they're not even thinking about right now."

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