

Researched Persuasive Writing and Speaking

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“It’s Safer Than Smoking”

The Harmful Truth and Addiction of Vaping

Breathe in. Breathe out. In. Out. A simple task that all living creatures learn to do within their first moments on Earth. Life begins and ends with a single breath. When breathing stops, life stops.

The body needs oxygen to function. When new chemicals, such as those found in a common vape are introduced, the parasympathetic action of breathing can be altered for the worse. Since 1964, smoking cigarettes has been declared a link to lung cancer and heart disease. In the 1960's, approximately 40 percent of Americans reported being regular cigarette smokers. This number steadily declined to about 20 percent in 2014(Centers for Disease Control and Prevention 2014). Coincidentally, in the mid to late 2010's, vaping became widely popular as an alternative to smoking cigarettes, most commonly as a way "to quit smoking".

The act of vaping is not addictive, but rather the nicotine content commonly found mixed in with the e-cigarette liquid. Rather than inhaling smoke, the individual inhales a heated vapor, consisting of propylene glycol, glycerin, nicotine, and other flavorings². Studies have shown that the average nicotine concentration of an e-cigarette is about 7.4 mg/ml. Unlike regular cigarettes, e-cigarettes come in different strengths and their nicotine concentration can range anywhere from 11 to 36 mg/ml(National Academy of Sciences 2018). These high concentrations of nicotine makes vaping just as addictive as regular smoking, so what's to say it's not equally as harmful.

One of the biggest concerns surrounding vaping is the age demographic. As of February 2020, there were 2,807 reported cases of EVALI, or e-cigarette or vaping-use associated lung injury, and 68 related confirmed deaths. Of these cases, 15 percent were under the age of 18, and another 37 percent was between 18 and 24. According to

the National Youth Tobacco Survey from 2021, 11.3 percent of high school students reported vaping (Park Lee E, et. al. 2021). Among current e-cigarette users, 43.6 percent said to have vaped more than 20 of the previous 30 days. A study performed by the University of Pittsburgh found that young adults who vape or use e-cigarettes are more than four times more likely to start smoking tobacco cigarettes within 18 months than their non-vaping peers. Many tend to only focus on the big numbers; however, these statistics are showing a new, younger generation of teenagers developing a nicotine addiction. The Truth Initiative says that 63 percent of JUUL users were not always aware that their product contains nicotine (Truth Initiative 2019). With smoking and lung disease being one of the leading causes of death in America, the youth need to recognize that their social habits may lead to a much more consequential, life threatening addiction.

The science behind vaping is still heavily unknown. With so many different types and brands of e-cigarettes, it becomes very difficult to single out or emphasize one specific vape. Since the popularity of vaping spiked in 2019, there have not been substantial studies surrounding the long term effects. The chronic risks may take decades to understand, and this time frame provides a reasonable excuse for vape users to deem it safe. But are excuses enough to validate potential health concerns?

As the rising popularity of vaping continues to grow, people need to acknowledge the unknown as a risk rather than validation. We must not concern ourselves with the what if's but rather the existing fact that inhaling chemicals is less than ideal. Despite low hospitalizations, just one patient is one too many. The act of vaping needs to die out for this new generation to be safe, not sorry.

References

- Centers for Disease Control and Prevention (US). (2020) *Outbreak of Lung Injury Associated with E-cigarette Use, or Vaping*. Retrieved from https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html
- Centers for Disease Control and Prevention (US). (2014) *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK294310/>
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Eaton DL, Kwan LY, Stratton K, editors. (2018, January 23). *Public Health Consequences of E-Cigarettes*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK507191/>
- Park-Lee E, Ren C, Sawdey MD, et al. (2021, October 1). *Notes from the Field: E-Cigarette Use Among Middle and High School Students*. Retrieved from https://www.cdc.gov/mmwr/volumes/70/wr/mm7039a4.htm?s_cid=mm7039a4_w
- SingleCare Team. (2022, February 15). *Vaping statistics 2022*. The Checkup by SingleCare. Retrieved from <https://www.singlecare.com/blog/news/vaping-statistics/>
- Truth Initiative. (2019, March 15). *JUUL e-cigarettes gain popularity among youth, but awareness of nicotine presence remains low*. Retrieved from <https://truthinitiative.org/press/press-release/juul-e-cigarettes-gain-popularity-among-youth-awareness-nicotine-presence>