

DATE:	February 6, 2020
TO:	The Honorable Senator Laurie Monnes Anderson Chair of the Senate Committee on Health Care
FROM:	James A. Bishara, M.D. Member of the Oregon Pediatric Society
SUBJECT:	Senate Bill 1577 on Vaping Flavors

The Oregon Pediatric Society (OPS) is the state chapter of the American Academy of Pediatrics. Our membership is committed to improving and protecting the health and well-being of all children in Oregon. For the record, my name is Dr. James Bishara. I am a pediatric cardiologist at OHSU's Doernbecher Children's Hospital practicing in Salem and a member of the Oregon Pediatric Society. I speak for myself and OPS today asking for your support of Senate Bill 1577 which bans most flavors for vaping products.

Overview

To clearly understand the need for action, the scope of the problem must be clear. Youth vaping has reached staggering levels. Estimates of youth vaping are steadily increasing. Between 2011 and 2015, vaping increased in teens by 900% (1). The increase in vaping continued over the next few years, with 20.8% of high school students reporting current vaping habits in 2018 (2) and 27% in 2019 (3). Over 10% of middle school students reported to frequent vaping in 2019 (3).

Nicotine is one of the most addictive drugs on the planet. We all know people who have tried and failed to quit. Children and adolescents are more likely to become addicted than adults. There is a generation of children who are becoming addicted to nicotine, most of them for life. The problem is only compounded by the fact that more than half of teenagers in 2018 didn't know that vaping aerosols contained nicotine and that they may become addicted.

Vaping Risks

The World Health Organization says that tobacco kills up to half of its lifelong users, making it reasonable to believe that vaping is less dangerous than smoking tobacco. However, there are no studies demonstrating the long-term safety of vaping. The e-cigarette or vaping product use-associated lung injury (EVALI) epidemic identified in 2019 has killed over 50 people. Vaping aerosols are known to contain cancer causing chemicals, and heavy metals such as manganese—which can cause Parkinson's-like symptoms—lead, and other toxic heavy metals.



E-cigarette flavoring agents pose another potential risk. Diacetyl is a compound commonly found in vaping flavors and is known to cause cancer and bronchiolitis obliterans when chronically inhaled. Each has a unique set of compounds that provide the flavor, and none have been tested for safety with chronic inhalational use. This is not harmless water vapor.

Role of Flavors in Vaping Addiction

A 2019 study in the journal *Pediatrics* showed users of non-traditional vaping flavors such as fruit, candy, buttery or dessert types were more likely to continue vaping than those using traditional flavors (4). There is clearly a link between continued use and the flavorings. Eliminating flavorings has a good chance of reducing future vaping addictions.

Flavor Ban

We must balance the potential benefit to existing smokers with the risk to a population of young non-smokers who are rapidly becoming addicted to vaping. I believe that Senate Bill 1577 is an excellent approach that will help curb teen use of vaping.

When the opponents of this bill inevitably tell you stories of people who have used vaping to stop smoking tobacco, I agree that it is a success for that person. When you listen to those stories I'd also like you to hear how difficult it was for that person to stop smoking: so difficult that they must continue to use nicotine multiple times a day to appease their addiction. These children will face the same lifetime of addiction. We can reduce the risk of becoming addicted to vaping and the associated health risks, both known and unknown, in the next generation with a flavor ban. The Oregon Pediatric Society and I urge this committee to support Senate Bill 1577 to ban vaping flavors.

- Wang TW, Gentzke A, Sharapova S, et al. Tobacco Use Among Middle and High School Students - United States, 2011- 2017. MMWR Morbidity and Mortality Weekly Report. 2018;67(22):629-633.
- Cullen KA, Ambrose BK, Gentzke AS, Apelberg BJ, Jamal A, King BA. Notes from the Field: Increase in use of electronic cigarettes and any tobacco product among middle and high school students – United States, 2011-2018. MMWR Morbidity & Mortality Weekly Report 2018; 67(45):1276-1277
- 3. Cullen, KA, et al. e-Cigarette Use Among Youth in the United States, 2019. JAMA. 2019; 332(21):2095-2103. DOI: 10.1001/jama.2019.18387
- 4. Leventhal, AM, et al. Flavored E-cigareete Use and Progression of Vaping in Adolescents. Pediatrics. Nov 2019; 144(5) e 20190789. DOI: 10.1542/peds.2019-0789