



Oregon Thoracic Society

A chapter of the American Thoracic Society

Dear House Committee on Health Care -

23 March 2021

The Oregon Thoracic Society is the state chapter of the American Thoracic Society and is comprised of lung doctors, scientists, thoracic surgeons, respiratory therapists, and other health care professionals on the frontline of caring for a population in the throes of a tobacco epidemic that keeps changing to addict future generations. E-cigarettes, vaping, and flavored cigars represent the current and future wave, and flavors are again being used to addict Oregon's youth. Tobacco industry documents since the 1970s have shown these companies have known that flavoring attracts children, and addicting a developing brain to tobacco makes it much harder to quit later. The Oregon Thoracic Society, along with the American Thoracic Society, American Heart Association, American Lung Association, and the American Cancer Society advise restricting on-line purchases to ensure that youth and teens are not obtaining nicotine in violation of our State laws.

Concerns regarding inhalation of flavoring agents:

Teens and youth are drawn to purchasing flavoring agents in tobacco products- many of which are available with little regulation on-line. Many of these flavoring chemicals are those designed to be eaten, not inhaled, and we have increasing data that inhaling these flavoring agents can cause death of lung cells. We also have human evidence with a newly-recognized epidemic of vaping related deaths, and despite industry insistence to the contrary, there is little scientific basis to believe that we will not see future deaths. Longterm, we will need decades to discover the consequences of a lifelong habit, but a protective public health approach demands that we not addict new users to discover how deadly these products will be. Long before vaping oils came along, interstitial lung diseases from inhaling a variety of chemicals have been well-described. Caring for these lung diseases is expensive, and they frequently result in permanent and debilitating lung scarring that leaves the patient with limited work options. Our society and employers not only pay their healthcare costs, that person becomes less able to contribute to the economy of their family and their community.

Specific chemicals, such as the benzaldehyde used in cherry or almond flavorings, can cause respiratory irritation and cough when inhaled, which may not be of significant concern with one use to most users, however it can be deadly to those with the common illnesses of asthma or COPD or other pre-existing conditions, whether inhaled directly or second-hand. A popular chemical for those who enjoy cinnamon flavors is cinnamaldehyde, which can cause effects that have been associated with the development of asthma. It can cause chronic cough, inflammation and suppress important immune cells in the lung in a dose-dependent fashion.



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Suppressing the immune system of the lungs decreases the ability of a person to fight off viral and bacterial infections, which are the most common causes of exacerbations of asthma and COPD, both of which can lead to death for individuals with those conditions. In addition, this is of particular concern with the circulating COVID19 pandemic. Furthermore, Oregon already has a very high cost burden for treating COPD and asthma. In addition, multiple flavoring agents including cinnamaldehyde and eugenol have been shown to be potential sensitizers for allergic diseases including not only asthma but also allergic dermatitis. Other flavoring agents, such as vanillin which is ubiquitous in many flavored tobacco products has led to release of inflammatory mediators from neurons, a mechanism which we know long term can lead to development of asthma. The track record of other substances that have similar effects, including inhaled tobacco, is one resulting in lifelong diseases that devastate family resources and communities.

There are almost too many examples to mention, but well-known in the pulmonary literature is “Popcorn Lung,” a form of bronchiolitis obliterans (a deadly and feared obstructive lung disease) that develops from occupational exposure to diacetyl and other butter flavors (eg 2,3-Pentanedione and acetoin). These buttery flavors are also contained in e-cigarettes and e-liquids, despite the industry’s own trade organization, the Flavor and Extract Manufacturers Association, officially recognizing the occupational hazard of these chemicals to be risky when inhaled. Also on this list are other chemicals identified to be risky when inhaled that can be found in e-cigarettes.

Flavoring targets youth and new users:

From sugary cereals to sugary beverages, flavors are a key part of marketing to attract new and young users. The US Surgeon General has found: “E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches that have been used in the past for marketing conventional tobacco products to youth and young adults.” Children are uniquely vulnerable to tobacco industry e-cigarette marketing using flavoring. The 2016 National Youth Tobacco Survey found that 78.2% of middle and high school students (that is 20.5 million youth) had been exposed to e-cigarette advertisements, which was an increase from 68.9 % in 2014. This is not just a vaping issue, the cigar and cigarillo market is growing due to fruit and candy flavored cigars designed to appeal to kids, packaged with bright candy flavors, placed in stores where visible by youth, and priced at a low point that they can afford. The top 5 most popular cigar brands for cigar users aged 12 to 17 are those that all come in flavored varieties from strawberry chocolate to apple and cherry.



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Legal age of 21 is not protective of youth-

Despite a legal age of 21 for tobacco, it is important to note that use of tobacco in youth remains pervasive, and that flavoring leads to initiation and persistence of use. Furthermore, website “filters” simply asking whether someone is 21 are insufficient to protect our youth from purchasing highly-addictive flavored products on-line. A 2014 study found that 70% of current middle and high school tobacco users had used a flavored product in the last month, and those 18-24 have had an 89% increase in risk of using a flavored tobacco product compared to those age 25-34. Data from the government’s Population Assessment of Tobacco and Health study (2013-2014) discovered that > 80% of 12-17 yr old kids who have ever used tobacco started with a flavored product. Two-thirds of children reported that they used a tobacco product because it came in a flavor they liked. I have had patients who started smoking cigarettes as young as 8 years old, and our schools are full of children vaping who are less than the prior legal age of 18.

Bottom Line & Personal Views:

The American Thoracic Society has found that: “Flavors are an essential element of the tobacco industry’s efforts to hook people on tobacco products. No one inherently wants to use tobacco-flavored tobacco. Candy, fruit or sweetened flavors lure youth to try tobacco products, mask the harshness of tobacco products and enable naive users to consume tobacco products until they become addicted. Without characterizing agents, the lure of tobacco products would be significantly reduced – much to the benefit of public health.”

It makes no sense to ban flavored cigarettes and prohibit on-line ordering of combustible tobacco products but exclude flavored e-cigarettes, vape flavors, cigars and hookah. Nicotine addiction via inhalational routes is a scourge on all of our communities, and a purchase age of 21 is not protective. We do not yet know whether e-cigarettes are “safer” than combustible cigarettes. As I tell my patients, it is hard to be worse, when combustible cigarettes kill half of regular users. However, that does not necessarily make it “safe” to switch to e-cigarettes. I have never met an adult smoker who was finally able to quit because Green Apple vape juice was finally available. For an adult smoker to quit smoking, there is no other flavor needed but tobacco. An adult smoker trying to quit can also purchase from a well-regulated e-cigarette vendor here in Oregon, who can ensure that they are an adult purchasing from a vendor following the public health regulations of our state. Allowing on-line orders of e-cigarettes is simply putting profit over people, and will result in highly-addictive products in the hands, bodies and minds of our children.



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Thank you all for your service to our State. Please do not hesitate to reach out if you have any questions or if we could provide any further information.

Sincerely,

Dr. Erika Maria Moseson, MD, MA
Pulmonary & Critical Care Medicine Physician
President Emeritus: Oregon Thoracic Society

References:

American Thoracic Society- Statements on tobacco control

<https://www.thoracic.org/advocacy/tobacco-control/>

ATS in Action- Tobacco & Kids

<https://www.thoracic.org/advocacy/tobacco-kids.php>

American Lung Association:

<https://www.lung.org/stop-smoking/smoking-facts/e-cigarettes-and-lung-health.html>

- Information on their calls for a flavoring ban

ATS Commentary for FDA nationwide flavor ban-

<https://www.thoracic.org/advocacy/resources/07-13-18-ats-flavor-comments-submitted.pdf>

- Provides a great deal of references below and for above testimony, summarized here:

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Flavors and Extract Manufacturers- deny that the flavors they have made in “GRAS = Generally Recognized as Safe” category are safe for inhalation.

<https://tobacco.ucsf.edu/sites/g/files/tkssra4661/f/u9/FEMAGRAS%20E cig%20030315.pdf>