



### **Oregon Thoracic Society encourages passage of SB 702**

The Oregon Thoracic Society is the state chapter of the American Thoracic Society and is composed of lung doctors, scientists, thoracic surgeons, respiratory therapists, and other health care professionals on the frontline of caring for patients with respiratory diseases. Our population is still 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 and attract new users. Tobacco industry documents since the 1970s have shown these companies have known that flavoring attracts children, and addicting a developing brain to nicotine makes it much harder to quit later. The Oregon Thoracic Society, along with the American Thoracic Society and many other allied healthcare organizations, advises a complete flavoring ban including menthol for all tobacco products, including cigars, e-cigarettes, chew tobacco, roll your own, pipe, hookah and other novel forms of tobacco in whatever form they may arise. Flavors are designed to addict new users to a harmful product. Substances like menthol mask the harsh effects of smoke or vape and are designed to help suppress the natural cough of a new user to allow the nicotine addiction time to catch hold. Statewide comprehensive bans are more effective than partial bans or local bans alone. We encourage our legislators to pass SB702.

### **E-cigarettes are not safe.**

Unflavored or tobacco flavored e-cigarettes may represent a path to quitting combustible cigarettes for those addicted to cigarette smoking. Those who are able to completely switch from combustible cigarettes to e-cigarettes likely lower their health risks. However, e-cigarettes still affect the health of the lungs, should not be promoted to non-smokers, and adding flavoring chemicals in addition increases these risks.

We have seen an epidemic of e-cigarette and vaping related illness and death, and despite industry insistence to the contrary, there is little scientific basis to believe that we will not see future harms. We will need decades to discover the full 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 has been well-described. Caring for these lung diseases is expensive, and they can result in permanent lung scarring that leaves people with respiratory disability and 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.

### **Concerns regarding inhalation of flavoring agents:**

Many of these flavoring chemicals are those designed to be eaten, not inhaled, and studies show that inhaling these flavoring agents can cause death of lung cells. 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 which decreases the ability of a person to fight off viral and bacterial infections. 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 has been associated with 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 some 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 as risky when inhaled. There are other chemicals already identified as risky when inhaled that are found in some e-cigarettes. If chemicals already known to be harmful to lungs and cause disease are openly included as flavors in e-cigarettes, how safe are the others? Shouldn’t the burden of proof be to show that any additives are safe? Isn’t that what the public expects?

**Flavoring targets youth and new users:**

These compounds are not included accidentally; they are cynically applied to hook youth and new users despite the health risks of both the additives and the long term habit. From sugary cereals to sugary beverages, flavors are a key part of marketing to attract new and young users. 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.

**Menthol and numbing the lungs:**

Menthol and synthetic non-flavored cooling agents numb the lungs and mask the natural coughing and anti-irritant response the lungs would normally have to inhaling toxins such as those in tobacco smoke and e-cigarette vapor. This enables users to inhale more, inhale deeper and more frequently, and inhale more of the dissolved addictive substance in the vapor, such as nicotine.

The 2017 and 2018 National Youth Tobacco Surveys revealed that among middle and high school students, menthol smoking was associated with greater smoking frequency and intention to continue smoking, compared to non-menthol smoking. Youth menthol smokers have significantly higher levels of measures of dependence, and that initiation with a menthol-flavored cigarette is associated with a higher relative risk of daily smoking.

Fortunately, the Oregon legislature can save lives. Menthol bans have led to increased quit rates in those addicted to menthol cigarettes. Following the 2017 ban on menthol in Canada, menthol smokers were more likely to attempt to quit and to succeed in quitting than non-menthol smokers.

**Legal age of 21 is not sufficiently protective:**

Despite a legal age of 21 for nicotine products, it is important to note that use of tobacco in youth remains pervasive, and that flavoring leads to initiation and persistence of use. 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. Children reported that they used a tobacco product because it came in a flavor they liked. Students under the age of 21 are using e-cigarettes in our schools. Much like their parents, who often took their first cigarettes from packs they found at home, children today will face the temptation to pick up the candy-flavored e-cigarette at home and take their first steps on the journey to a life-long addiction.

**Bottom Line:**

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."

The Oregon Thoracic Society encourages passage of SB702 to protect Oregonians from addiction and disease, save lives, and decrease overall healthcare expenditures in the State of Oregon.

Dr. Ethan Corcoran, MD, PhD- President  
Dr. Bradford Glavan, MD- President-elect  
Dr. Ryan Clay, MD- Secretary  
Dr. Karen Wesenberg, MD- Past President  
Dr. Erika Moseson, MD- ATS Liaison

Executive Committee of the Oregon Thoracic Society

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<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>

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