

Hello. Thank you for having me. I'm Kathleen Dunbar, I'm a dental hygienist with Eastport Health Care where I've been working for 10 years. I'm also a native of Washington County, born and raised in Eastport.

I just want to touch on menthol and flavored products in general and then go into more detail about tobacco use and oral health.

I'm very concerned about young people getting hooked on tobacco products because of the long-term detrimental oral health effects. The flavors not only target youth specifically, but also mask the harsh toxic properties of tobacco. The flavors seem fun and appealing, and menthol specifically is dangerous because, aside from being kind minty, it cool and numbs your throat, it's why they use it in cough drops and sore throat sprays. Because of the numbing power of the menthol, it masks the harshness of the tobacco and studies have shown that smokers will inhale more deeply and get addicted more quickly if they use menthol products and are also less likely to quit using these flavored products than non-flavored products. Additionally, studies have demonstrated that menthol increases nicotine receptor density, creating a higher dependence, and making the product more addictive. The American Dental Association recently issued a statement in support of banning menthol-flavored tobacco products, believing that the ban would cause some smokers to quit smoking altogether rather than switch to non-menthol flavored products.

Now I want to talk about the effects of smoking in general on oral health and why I'm passionate about kids not getting hooked on these products. There's the really obvious side effects that everyone thinks of, such as tooth staining and bad breath. But what is really concerning is that tobacco use is the number one risk factor for oral cancer and also for periodontal disease.

In regard to oral cancer, smokers are 10x more likely to develop oral cancer than non-smokers, specifically squamous cell carcinoma. It's responsible for about 40% of all oral cancers and even more when combined with alcohol. One of the saddest stories that I've heard in my professional career was from one of my colleagues. They said they received a late night phone call from either a friend or patient. The person was panicking and very distraught. They were going to have surgery the next day to remove oral cancer which involved having their *tongue cut out*. They were never going to be able to speak again and they were having a hard time coping with that. If we can do something to help prevent that, I think we most certainly should. It's usually curable if caught in early stages but can be fatal if caught too late. Even when treatment such as radiation and chemotherapy are successful, it can have long-lasting effects. For example, sometimes radiation therapy can damage the salivary glands causing permanent, xerostomia, or dry mouth. This can be uncomfortable but also lead to a higher rate of tooth decay.

The much more prevalent oral health implication with tobacco use is periodontal disease, gum disease in laymen terms. Up to 80% of American adults have some level of periodontal disease. Not everyone has severe disease but most people see some effects. Periodontal disease is an inflammatory disease caused by specific bacteria, and the inflammation can lead to irreversible bone loss around the teeth. If enough bone is lost, teeth will become unstable

and can lead to tooth loss. It is the most common cause of tooth loss. Tobacco use and smoking makes you much more susceptible by changing the microflora in your mouth, reducing your body's ability fight infection due to poor immune response, and reducing the ability to regenerate new tissue leading to poor healing. There's also evidence that menthol may inhibit gingival healing as well. But even more concerning to me than tooth loss, are the systemic implications of periodontal disease. It is very closely linked to diabetes, cardiovascular disease, respiratory illness, pre-term low birthweight babies, and even recently to Alzheimers, arthritis, and types of cancer. And that's without factoring in tobacco at all. That's just having periodontal disease. And that's mainly because of the burden it puts on your immune system and different reactions that your body has to the disease in your mouth.

So you might not care about tooth loss or bleeding gums, but you most likely care about diabetes and Alzheimer disease and such. They estimate that having periodontal disease actually decreases your life expectancy by about 7 years. And again, smoking is the number one risk factor.

So, I support this bill because I think if we can prevent young people from getting hooked on tobacco products at a young age, we can prevent them from being adults who suffer from oral cancer, tooth loss, complications of periodontia disease, etc.

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