

February 24, 2016

Re: HB 4062

Chair Barnhart, Chair Greenlick, members of the committees, my name is Dr. Jennifer Vines and I am the Deputy Health Officer for Multnomah County Health Department. I want to thank you for the opportunity to provide information today about electronic cigarettes and inhalant delivery systems.

As a family doctor with board certification in preventive medicine and public health, I have spent 10 years working in primary care and public health in the Portland metro area.

Our Multnomah County Board of Health recognizes that unregulated electronic cigarettes, vape pens, and inhalant delivery systems represent an urgent public health issue. In 2015, our Board of County Commissioners passed ordinances intended to reduce youth access to these products, including prohibiting sales to and possession of inhalant delivery systems for anyone under age 18, and incorporating inhalant delivery systems into our local tobacco retail licensing ordinance.

Adolescence is a pivotal time in the life course where health is concerned. Implementing a tax on inhalant delivery system products is a win for public health. The Surgeon General's Report, *The Health Consequences of Smoking - 50 Years of Progress*, clearly states that making tobacco more expensive is a public health best practice to reduce youth initiation and use and to help people quit. It makes good sense that applying the same logic to inhalant delivery systems and raising the price via taxes will also help reduce the number of youth who ever pick them up.

We know that youth use and abuse tobacco, alcohol and marijuana despite laws that prohibit the sale of these products to young people. A price increase through taxation is one essential part of a comprehensive public health approach to prevent use by young people. The majority of current smokers started by age 18 and almost all by age 26. The Surgeon General's Report cites research showing that young adults are less likely to start using nicotine-containing products the more expensive they are.

Nicotine is not just the highly addictive substance in tobacco. It has its own health effects including accelerated heart and vascular disease, and is associated with low birth weight and prematurity when used by pregnant women. Adolescents and young adults are particularly susceptible to the addictive effects of nicotine because their brains are still developing. Animal models suggest long-term structural changes occur in the brains of youth exposed to nicotine, notably in the areas controlling intellect and the brain's reward pathways.¹ Studies show an association between youth nicotine use and behavioral problems in later life such as depression, anxiety and other substance abuse.²

Inhalant delivery system vapors are not just "water vapor." The science is limited because of the variability in liquid nicotine ingredients, but studies have detected varying levels of nicotine, carcinogens, volatile organic compounds, metals and other chemicals. Users exhale fine particles

¹ US Department of Health and Human Services, *The Health Consequences of Smoking – 50 years of progress*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

² U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.

which, like secondhand cigarette smoke, can penetrate deep into the lungs and blood stream.³ Research is also beginning to find that the flavors added to inhalant delivery system liquids may be toxic on their own.⁴ Raising the price of nicotine containing products will almost certainly reduce the number of youth who are at best exposing themselves to the unknown health effects of inhalant delivery systems and at worst setting themselves up for a lifetime of nicotine addiction.

It is imperative that we implement strategies that prevent youth nicotine addiction and support adults who want to quit. Dedicating a portion of HB 4062's tax to the Tobacco Use Reduction Account (TURA) will help support interventions across the state that will do just that.

We appreciate your dedication to this very important issue. Thank you again for the opportunity to provide testimony today.

Sincerely,



Jennifer Vines, MD, MPH
Deputy Health Officer
Multnomah County Health Department

³ Grana, R., N. Benowitz, and S. Glantz, Background Paper on E-cigarettes. Center for Tobacco Control Research and Education, University of California, San Francisco and WHO Collaborating Center on Tobacco Control, 2013

⁴ Allen, JG, et al. Flavoring chemicals in e-cigarettes: Diacetyl, 2,3-pentanedione, and acetoin in a sample of 51 products, including fruit-, candy- and cocktail-flavored e-cigarettes. Environmental Health Perspectives, 2015.