

February 5, 2016

House Health Care Committee
900 Court St. NE- HR E
Salem, Oregon 97301

Re: HB 4062 – Nicotine delivery systems tax

Chair Greenlick, members of the committee, 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 written testimony in support of HB 4062.

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.

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. Many current smokers started by age 18 and almost all by age 26, and research shows that young adults are less likely to start using nicotine-containing products the more expensive they are.

Adolescence is a pivotal time in the life course where health is concerned. Implementing a tax on inhalant delivery system products at 50% of the retail sales 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.

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 and in fact, the vast majority of smokers begin before age 18. 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 exposing themselves to the unknown health effects of inhalant delivery systems.

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 written testimony.

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.