



**Testimony of Breathe DC Inc.**  
**Alisha Thomas, MD, Health Educator**  
**Judiciary and Health and Human Services Joint Public Hearing**  
**B21-152: The Prohibition Against Selling Tobacco Products to Individuals Under 21**  
**Amendment of 2015**  
**July 7, 2016**

Good afternoon Chairperson Alexander, Chairperson McDuffie and members of the Committee of the Judiciary and the Committee on Health and Human Services. My name is Dr. Alisha Thomas, and I too am representing Breathe DC as a health educator. Given my pediatric background, I will speak further on the implications of passing **Bill B21-152** from a medical and developmental perspective.

The CDC's Morbidity and Mortality Weekly Report published in April of this year showed the declining rates of tobacco use among middle and high school students. This is promising, but still over 2% of middle school students and over 9% of high school students admit to its use in the past 30 days,<sup>1</sup> making this a significant public health issue.

According to the World Health Organization, there are multiple deleterious consequences to smoking in the younger population. It has been associated with a reduced rate of lung growth. We know that lung development peaks at 17-18 years old,<sup>2</sup> so it is possible that lung function will be stunted if smoking begins at this age as opposed to 21. In addition, adolescent smokers are almost 3 times as likely to be short of breath, and they produce twice as much phlegm as those who don't smoke.<sup>3</sup> Smoking not only affects the lungs but also the heart, as the resting heart rate of young smokers are 2-3 beats faster per minute than nonsmokers. This can result in the inhibition of physical fitness, even in well-trained individuals like competitive runners!<sup>4</sup>

Of course, smoking at an earlier age means greater exposure to the damaging agents in cigarette smoke, leading to its long-term sequelae. According to the CDC, if smoking among youth continues at its current rate, **1 in 13** Americans under the age of 18 will die prematurely from a smoking-related illness.<sup>5</sup> Such illnesses include many different cancers: leukemia, bladder, cervical, colorectal, esophageal, kidney, laryngeal, liver, lung, oral, pancreatic, stomach, and tracheal to name a few.<sup>6</sup> It increases the risk of cardiovascular diseases like coronary disease, hypercholesterolemia, and strokes,<sup>7</sup> and respiratory illnesses like chronic obstructive pulmonary disease, asthma, and even tuberculosis infections.<sup>8</sup>



We must ask: do adolescents at the age 18 have the decision making capacity required to allow engagement in such harmful behavior? We know that the adolescent brain at 18 is not fully developed, but the prefrontal cortex is undergoing myelination and synaptic pruning processes. This allows more efficient signaling to the rest of the brain, which in turn allows for better adjustment of risk and reward, problem-solving, prioritizing, and long-term planning. The brain is not fully mature until the mid-20s,<sup>9</sup> so our organization cannot advocate expecting a teenager to make a decision that will affect the rest of his or her life. Rather, we at Breathe DC advise that this bill be passed to protect our children. In doing so, we can significantly curb the youth tobacco use rate, mitigating the smoking-related premature deaths of **5.6 million** Americans under 18.<sup>5</sup> Thank you for considering the passage of this necessary and influential bill.

#### REFERENCES:

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