## Beyond Coal Testimony, Dr Murphy, HB 1545, Support

Hi, my name is Dr. Karly Murphy, and I'm a board-certified general internist and a mother living in Towson. Today, I ask for a favorable report on HB 1545.

In all sides of my life, I see the impact of coal on my community.

First, as a physician, I see the health implications in my patients.

We know that coal plants lead to the release of mercury, sulfur dioxide, and other toxic air pollutants. What this means is that when people breathe them in, these toxic particle go into their lungs. If you have a reactive airway disease, such as asthma, it acts as a trigger to cause your small airways known as bronchioles to swell and narrow. A similar pathophysiology occurs with bronchospasms in emphysema. The person experiences wheezing, shortness of breath, chest tightness, and coughing. This is an asthma exacerbation and can be life threatening. In fact, according to the Maryland Dept of Health, Baltimore has the highest pediatric asthma hospitalization rate in Maryland and one of the highest in the nation.

I remember one young lady who I took care of in the hospital who had been hospitalized at least seven times for asthma exacerbation. She took 3 inhalers as instructed and yet she was still getting asthma exacerbations that were so severe she needed to go to the hospital each time. This was apart from the times that she would see her pulmonologist (lung doctor) or PCP to try to prevent a hospitalization. Here in Maryland, over one third of adults have asthma symptoms in a given year. Another of my longitudinal patients is also on 3 medications for her emphysema and notices that she finds it more difficult to breathe when it's hot, hazy and the air pollution index is up. So she has to stay indoors and just wait. She tells me it's difficult as she wants to play with her daughter but needs to limit herself when the index is up. Among adults over age 65, the average hospitalization is 4.3 days for an asthma exacerbation according to the Maryland Asthma surveillance report in 2012.

Then as a mother, I worry about the effects of coal and greenhouse gas emissions. My child doesn't have asthma... yet. But it's a real possibility because almost 10% of children in Maryland have asthma. I want her and my future son to grow up running around outside and riding bikes around the neighborhood.

The HB 1545 legislation before you seeks to not only to address health but also to address workers affected by coal plant closures. In the short and long-term, coal and greenhouse gas emissions are detrimental to our health and the well-being of our community.