HB248 – FAV

The Honorable Kumar Barve, Chair
The Honorable Dana Stein, Vice Chair
House Environment & Transportation Committee
Room 251 House Office Building
6 Bladen Street
Annapolis, MD 21401

Re: HB 248 - Legionnaires' Disease Prevention Act

Dear Chairman Barve, Vice Chair Stein and Distinguished Committee Members:

Thank you Delegate Stewart for introducing this bill. I would like to first start with thank you for taking the time to review this letter. It is with much elation to be able to support a healthcare policy that would have a direct impact on the health and well-being of my current patients, and also to prevent others from becoming future patients of either myself or my colleagues.

As you may have been made aware, *Legionella pneumophilia* is a bacterial pathogen that flourishes in stagnant water and individuals become exposed and possibly infected by contact, ingestion, or aerosol inhalation. This may progress to pneumonia called Legionnaires' disease. In current clinical practice, *Legionella* is recommended to be tested in individuals with severe pneumonia, failed outpatient treatment, immunocompromised state, travel history, admission for > 48 hrs in the hospital or healthcare facility, or linked to a confirmed source of *Legionella*. Standard treatment requires antibiotics but the actual hospitalization may be more complicated than an overnight stay. This may entail oxygen support, noninvasive mechanical ventilation with positive airway pressure device and mask support, or more invasively with an endotracheal tube and mechanical ventilator. Recovery is also variable: discharge home with needing oxygen support, discharge to a facility for further recovery and care, or need for tracheostomy due to dependence for a mechanical ventilator support. Recovery to baseline may take weeks to months, which means weeks to months being away from home, away from love ones, away from work. If we talk about finances, waterborne illnesses incurs upwards of $3.33 billion dollars in direct healthcare costs with the majority of hospitalizations and deaths being from nontuberculous mycobacteria, *Pseudomonas*, and *Legionella* (estimated $2.39 billion annually). Imagine the indirect cost of productivity from the time taken from work (temporary or long term) by the individual or their relatives.

Currently, CMS mandates healthcare facilities to develop and adhere to policies and procedures in building water systems that reduce the risk of growth and spread of opportunistic pathogens such as Legionella. In addition, with ANSI/ASHRAE 188-2018, standards and risk management requirements were established for building water systems to minimizing *Legionella*. However, no such standards or policies are in place for public entities in the state of Maryland. With the COVID-19 pandemic came the closures of many businesses. Water systems (plumbing systems, hot water tanks, cooling towers, etc.) then become stagnant and subsequently turn into the

perfect breeding ground for bacterial overgrowth, *Legionella pneumophilia* being one of them. With this comes a risk for outbreaks in the public schools, libraries, offices, etc.

The previous patient population at risk: individuals with underlying lung disease such as chronic obstructive pulmonary disease (COPD), asthma, interstitial lung disease, or pulmonary fibrosis (scarring), the immunocompromised, the elderly, now have a new group of individuals joining them: the individuals who recovered or survived COVID-19 pneumonia. Clinically, patients who had severe covid-19 pneumonia that required hospitalization or were critically ill have very fragile lungs. The recovery period is very protracted and prolonged. Many of our patients develop permanent scarring of their lungs and an overall decrease in their day to day function. A previously healthy 45year old man with no medical history suddenly now has lungs of a 90 year-old long time smoker. He is now also at risk of severe complications from a disease that can be easily preventable if the proper interventions are in place.

The House bill would require the Department of the Environment to adopt regulations requiring an owner or operator of a public building to establish and implement a water management program to prevent growth and spread of Legionella. This is vital for the safety and health of your constituents.

Thank you for your consideration,

Meilin Young, MD
Pulmonary & Critical Care Medicine

Resources:

1. https://wwwnc.cdc.gov/eid/article/27/1/19-0676_article
2. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Policy-and-Memos-to-States-and-Regions-Items/Survey-And-Cert-Letter-17-30-
3. Metlay, Joshua P., et al. "Diagnosis and treatment of adults with community-acquired pneumonia. An official clinical practice guideline of the American Thoracic Society and Infectious Diseases Society of America." *American journal of respiratory and critical care medicine* 200.7 (2019): e45-e67.
4. IDSA/ATS Guidelines for CAP in Adults • CID 2007:44 (Suppl 2)

Short Biography:

Practicing physician certified in Pulmonary Medicine and Critical Care Medicine in Pittsburgh, Pennsylvania with a special interest in treatment of patients with Chronic Obstructive Pulmonary Disease (COPD), Emphysema, and Asthma. A group of colleagues and I also established a multidisciplinary Post-Acute COVID syndrome clinic in helping individuals with their recovery from long-term symptoms.