



Alliance to Prevent Legionnaires' Disease

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October 21, 2022

The Honorable Gene Yaw
Pennsylvania Senate
362 Main Capitol
Harrisburg, PA 17120

Re: Legionnaires' Disease Prevention

Dear Senator Yaw:

The Alliance to Prevent Legionnaires' Disease (APLD) is a nonprofit public health advocacy group dedicated to reducing the occurrence of Legionnaires' disease by promoting public research, education, best practices for water management, and advocating for root cause solutions and policies that most effectively combat this preventable disease.

Given our mission, we deeply appreciate the opportunity you are providing to engage in discussions about how the Commonwealth of Pennsylvania might reduce or eliminate instances of Legionnaires' disease among residents.

As you should expect, we promote and use a science, logic, and data-oriented prevention approach guided by an intense focus from the perspective of Legionnaires' disease victims and their families. We perform research and educate vulnerable populations, the medical and disease diagnostic communities, and public policy makers. We prioritize root causes at the most proximal point in the water supply system as the most effective approach to address virtually 100% of Legionnaires' disease cases, starting with source water management, treatment and distribution.

With regards to true Legionnaires' disease prevention, we would ask you to consider the following:

Legionnaires' disease is a waterborne illness. *Legionella* bacteria is found throughout the environment and especially source water such as lakes and rivers that supply our public water system and provide our homes and facilities with the water we drink and use to shower, clean, relax in, among numerous other uses. According to the CDC, 96% of Legionnaires' disease cases are individual and sporadic, separate from outbreaks affecting two or more in a common location and timeframe. As a waterborne bacteria, *legionella* doesn't just materialize in a home – it is sent in from the water supply. A 2014 study by the EPA in Cincinnati found the bacteria in

47% of household taps across 268 samples. Just this year, New Jersey state officials tested homes in Hamilton County and found the bacteria in 50% of the household samples.

Legionella prevention policies are increasingly focusing on methods of controlling legionella through water supply management approaches. The Pennsylvania EPA recognized *legionella* risk from the incoming water supply by requiring in recent years a minimum level of disinfectant residual throughout public water supply systems. Illinois recently introduced and adopted sweeping new water management guidelines that required nitrification plans, nutrient control, water stagnation, water age, flushing, and a .5 ppm minimum disinfectant residual – and followed it up with requiring water utilities to notify end users of water system disruptions known for disturbing biofilms that release *legionella* bacteria and other pathogens through the water distribution system. The Alliance believes strongly that these approaches have merit and should be considered in any new efforts to prevent Legionnaires' Disease.

We need to focus on those most vulnerable to Legionnaires' Disease. Those who are immune-compromised or have comorbidities are the most vulnerable. This especially includes the homebound elderly, those who are immune-compromised, being treated with immune suppressing medications, smokers, and who interact with water directly and routinely throughout every day in their own homes. It's important to note that the average family uses 300 gallons of water per day in very direct ways of intense exposure, making home exposure a leading risk factor.

Legionella exists in the source water and public water distribution system. It is far more effective to properly manage, treat and monitor water in the public distribution system than it is to try to address these pathogens after they have already entered premise plumbing. This can be done by treating water with disinfectant at the water treatment facility and ensuring there is sufficient residual disinfectant throughout the water distribution system so that it is continually disinfected *before* it enters our homes and buildings. Recent outbreaks around the country like in Flint, Michigan, Quincy, Illinois and Saratoga Springs, NY demonstrate that systemic issues directly impact rates of Legionnaires' disease.

We need to focus on all cases of Legionnaires' disease to prevent it. Given that 96% of all Legionnaires' cases are sporadic, there must be a much stronger focus around ensuring that the water received by homes as well as facilities and buildings are *legionella*-free.

Progress in reducing Legionnaires' disease has been undermined by a fixation on outbreaks only – and building points of exposure only – often driven by profit and media focus. According to CDC data, there are approximately 50 outbreaks (two or more cases in a common location and time period) per year that historically has comprised 4% of Legionnaires' disease cases. Individual and sporadic cases (not from outbreaks) are 24 times the number of outbreak cases at 96% of all cases reported based on historical CDC data. However, individual cases of the disease are seldom investigated while outbreaks are often investigated on at least a basic level by local public health departments, who occasionally request CDC support. This focus on outbreaks-only and simplified investigations results in the overemphasis on building exposures and has attracted a cottage industry offering products, testing, consulting and services who often drive for regulations that create a "forced" market for them – even though the science, the data and the cost-benefit analysis doesn't justify it.

Leading experts and authorities have rejected *legionella* testing as a method of controlling for Legionnaires' disease. In a paper on the prevention of Legionnaires' disease, the World Health Organization says "*There appears to be little correlation between Legionella culture test results and human health risk (Kool et al., 1999; Bentham, 2002). Legionella testing cannot be considered a control measure, because of uncertainties about the reliability of culture, time delays, differences between culture requirements for different Legionella species, and dynamics of the population.*"

In addition, *legionella* testing for building water management plans were specifically considered and excluded in ASHRAE Standard 188-2021 *Legionellosis: Risk Management for Building Water Systems* (substantially adopted to create the CDC's Legionella Toolkit). Standard 188 was developed over 15 years via the ANSI standard development processes and involved all stakeholders – from the CDC, to public health officials, microbiologists, chemists, engineers, water treatment professionals, and water management experts.

Health and elderly care facilities supported by the U.S. Centers for Medicare and Medicaid (and/or accredited by the Joint Commission on Health) are required to develop and implement water management plans based on ASHRAE Standard 188-2021 *Legionellosis: Risk Management for Building Water Systems*. These requirements were put in place due to the vulnerable high-risk, health-compromised populations that congregate among those facilities. Similar to the ASHRAE Standard 188 committee, specific *legionella* testing requirements were considered and rejected by the CMS. This federal requirement already addresses the higher risk facilities in Pennsylvania.

In closing, the Alliance to Prevent Legionnaires' Disease remains committed to new public policies that follow the science and the data and then focuses on the root causes to prevent ALL cases of Legionnaires' disease. In addition, we oppose policies that distract from the majority of cases, consume precious resources and funding that is better spent elsewhere, and ignore the vast majority of Legionnaires' victims.

We would welcome the opportunity to work with you and your Committee to introduce legislation that prioritizes a root-cause oriented approach to preventing this disease, modeled after effective policies that have both been put in place in other states to establish Pennsylvania as a leader in the fight against Legionnaires' disease.

Thank you again for the opportunity to participate, and for your support of credible and effective prevention policies going forward.

Sincerely,

Marcy E. Savage

Marcy Savage, Director of Policy and Government Relations
Alliance to Prevent Legionnaires' Disease