

SB 1285 (2019-20 Legislative Session) Statement  
Presented to  
The Senate Democratic Policy Committee  
By  
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Dear Senators,

I am writing in support of the introduction of legislation that would require the development and implementation of Water Management Plans by building owners and water distribution systems including routine testing for the prevention of Legionellosis.

In 2000 I was the chairman of the committee in charge of proposing to the French government a strategy for the implementation of regulations after several Legionnaire's disease outbreaks in Paris (Soccer World Cup in 1998 and the G. Pompidou Hospital in 2000). Our strategy included requiring Water Management Plans in hospitals and, later, in all public buildings, with mandatory control of water systems including *Legionella pneumophila* monitoring inside these buildings and a requirement to report testing results to the local public health authorities. This policy was then formalized through national regulations. Some other monitoring parameters were added, only for hospitals, in the 2005 Water French Guidance in Hospital Settings (Guide de l'Eau dans les Etablissements de Sante 2005). In 5 years' time the impact of this strategy on Legionnaires' disease cases was excellent. The implementation of these control and monitoring regulations revealed the need to improve the quality of the water systems inside buildings because the chlorine disinfection had been not sufficient for ensuring consistently good control of *Legionella pneumophila* (the maximum admissible concentrations of chlorine in drinking water in France and many European countries are lower than in the US). In addition to a dramatic decrease of sporadic cases in hospitals,

cases in hospitals, we have now not experienced any hospital-based Legionnaires' disease outbreaks for a decade.

The same kind of regulations were gradually implemented in many European countries and the new 2020 European Drinking Water Directive requires Legionella monitoring. As Vice-Chair (2004-2012) and Chair (2012-2016) of Scientific Committee for Emerging and Newly Identified Health Risks (SCENIHR) of the European Commission in Brussels, I can attest to the interest of the different public health authorities in water management plans and monitoring of *Legionella pneumophila*. Culture testing for Legionella is the "gold standard" for regulations. In France, the target concentration level is  $< 1.000 \text{ UFC } Legionella \text{ pneumophila/L}$ , the alert level which triggers an assessment of the cause of this concentration and potential corrective action is  $> 1.000 \text{ UFC/L}$  and the water system must be switched off if concentration levels reach  $10.000 \text{ UFC/L}$  of *Legionella pneumophila*. The thresholds for required action are lower for areas with immunocompromised patients. Monitoring must be performed at least each trimester but the number of sampling points (critical and other points of use) is reduced when the system has demonstrated it is consistently obtaining proper results. Routine monitoring of hospitals may also include once a year *Legionella species* testing if the hospital desires. More recently, PCR detection methods may also be used for routine monitoring. However, the law requires data be produced by culture testing, which remains the gold standard, for any official request or legal proceeding.

If necessary, I would be happy to share documents and references related to the French and European experiences dealing with monitoring of *Legionella pneumophila* in potable water systems and cooling towers.

Best regards,



Pr. Philippe HARTEMANN