

DIRECT FROM CDC ENVIRONMENTAL HEALTH SERVICES



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Water Management Programs Are Key to Managing Legionella Growth and Spread

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Editor’s Note: The National Environmental Health Association (NEHA) strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, NEHA features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the Journal.

In these columns, authors from CDC’s Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

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In summer 2021, several U.S. public health jurisdictions reported increases in Legionnaires’ disease cases above their respective 5-year baseline averages (Michigan Department of Health & Human Services, 2021). While the Centers for Disease Control and Prevention (CDC) does not know to what extent building water systems might have contributed to these increases, periods of reduced building occupancy or building closure and low water usage can create hazards for occupants. Reopening schools, workplaces, and businesses—and more people traveling and staying in hotels—can elevate the risk of exposure to Legionella bacteria if appropriate steps are not taken. Environmental health professionals have an important role in reminding building owners, building operators, and cooling tower operators of ways to safely reopen buildings to prevent the growth of Legionella. Water management programs help people identify hazardous conditions and take steps to minimize the growth and spread of Legionella and other waterborne pathogens one altogether (Clopper et al., 2021). CDC investigations show, however, that almost all (9 in 10) Legionnaires’ disease outbreaks were caused by problems preventable with more effective water management (Garrison et al., 2016).



CDC’s toolkit—Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings (www.cdc.gov/od/oc/ohrt/analysis/legionnaires)—is the most comprehensive and designed to help people understand

- which buildings and devices need a Legionella water management program to reduce the risk for Legionnaires’ disease,
- the key elements of a water management program, and
- how to develop it.

Remind Building Owners and Operators of the Risk From Stagnant or Standing Water in a Plumbing System

Stagnant or standing water in a plumbing system can increase the risk for growth and spread of Legionella and other biofilm-associated bacteria. When water is stagnant, the hot water temperatures in buildings can fall into the favorable range for Legionella growth (77–113 °F [25–42 °C]). Stagnant water can also lead to low or undetectable levels of disinfectant, such as chlorine. Ensuring that the water system is safe to use after a prolonged shutdown can minimize the risk of Legionnaires' disease and other diseases associated with water.

