

## ▶ DIRECT FROM CDC ENVIRONMENTAL HEALTH SERVICES

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## Keep Your Water Safe With Resources From the Centers for Disease Control and Prevention

**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 tools, resources, and guidance for environmental health practitioners. 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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People in the U.S. have access to some of the safest public drinking water supplies in the world (Centers for Disease Control and Prevention [CDC], 2021a). Environmental health professionals are one of the key groups that help make drinking water safe. They also help make water safe for communities that depend on private wells, residents in buildings with complex water systems, and swimmers who exercise regularly in pools. The Water, Food, and Environmental Health Services Branch (WFEHSB) within the Centers for Disease Control and Prevention (CDC) supports environmental health professionals with tools and resources to strengthen safe water for community health (Table 1).

In the U.S., the rate of reported cases of Legionnaires' disease has grown by nearly nine times since 2000 (CDC, 2021b). Some

resources that could help environmental health professionals are the *Legionella* Environmental Assessment Form and the Toolkit for Controlling *Legionella* in Common Sources of Exposure. The *Legionella* Environmental Assessment Form enables public health officials to gain a thorough understanding of a facility's water systems and aerosolizing devices. The form also assists facility management with minimizing the risk of Legionnaires' disease. The *Legionella* Environmental Assessment Form Marking Guide provides instructions and leads users through the form. In addition, the Toolkit for Controlling *Legionella* provides public health and building owners and operators with concise, actionable information on controlling *Legionella* in commonly implicated sources of Legionnaires' disease outbreaks.

CDC investigations found that 9 out of 10 outbreaks of Legionnaires' disease were caused by problems preventable with more effective management of water systems (CDC, 2016; Clopper et al., 2021). Water management programs are a key tool in preventing this deadly disease. Preventing Legionnaires' Disease: A Training on *Legionella* Water Management Programs is a free training for professionals involved in water management programs that is designed to provide education on how to reduce risk for *Legionella* in buildings and facilities (Figure 1).

About 1 out of 8 residents in the U.S. gets their drinking water from private wells (Dieter et al., 2018; U.S. Census Bureau, 2018). Approximately 1 out of 5 sampled private wells has been found to be contaminated (DeSimone et al., 2009). WFEHSB recently restructured the Private Well webpage to help environmental health practitioners easily access helpful tools and resources such as fact sheets, guides, and GIS contaminant maps illustrating private well water quality. Practitioners can also find additional resources addressing why it is important to test well water and what contaminants to test for.

Swimming and other water-related activities are excellent ways to be physically active; however, they are not risk-free. CDC resources and tools can help environmental health programs maximize the benefits of healthy and safe swimming while minimizing the risk of illness and injury. The CDC Model Aquatic Health Code is a free, science-based guide that reduces the risk of waterborne illness outbreaks, drownings, and chemical poisonings at public pools and other aquatic venues. Furthermore, the CDC Pool Inspection Training for Environmental Health Professionals can help pool

FIGURE 1

## Learn How to Create a Water Management Plan With the Preventing Legionnaires' Disease: A Training on *Legionella* Water Management Programs

### What Topics Does the Training Address?

The training addresses the 7 steps of a *Legionella* water management program. These 7 steps, outlined in CDC's Water Management Program toolkit, operationalize the ASHRAE 188 standard for minimizing the risk of Legionnaires' disease.

**Module A: Getting Started – Introduction to *Legionella***  
Step 1: Create a Water Management Program Team

**Module B: Hazard Analysis**  
Step 2: Describe the Building Water Systems Using Text and Flow Diagrams  
Step 3: Identify Areas Where *Legionella* Could Grow and Spread

**Module C: Hazard Control**  
Step 4: Decide Where Control Measures Should Be Applied and How To Monitor Them  
Step 5: Establish Ways To Intervene When Control Limits Are Not Met

**Module D: Confirmation**  
Step 6: Make Sure the Program Is Running as Designed and Is Effective (Verification and Validation)  
Step 7: Document and Communicate All the Activities of Your Water Management Program

The training also includes case studies in a healthcare facility and manufacturing facility as well as resources for creating water management program action plans.



Learn more about this training at [www.cdc.gov/nceh/ehs/elearn/prevent-LD-training.html](http://www.cdc.gov/nceh/ehs/elearn/prevent-LD-training.html).

TABLE 1

### Water Resources From the Centers for Disease Control and Prevention

Resource	Website
Safe Water program	<a href="http://www.cdc.gov/nceh/ehs/water">www.cdc.gov/nceh/ehs/water</a>
<i>Legionella</i> control resources	<a href="http://www.cdc.gov/nceh/ehs/water/legionella">www.cdc.gov/nceh/ehs/water/legionella</a>
Private well resources	<a href="http://www.cdc.gov/nceh/ehs/water/private-wells">www.cdc.gov/nceh/ehs/water/private-wells</a> <a href="http://www.cdc.gov/nceh/ehs/water/private-wells/resources.html">www.cdc.gov/nceh/ehs/water/private-wells/resources.html</a>
Swimming pool resources	<a href="http://www.cdc.gov/nceh/ehs/activities/mahc.htm">www.cdc.gov/nceh/ehs/activities/mahc.htm</a> <a href="http://www.cdc.gov/nceh/ehs/elearn/pool-inspection.html">www.cdc.gov/nceh/ehs/elearn/pool-inspection.html</a>
Wastewater resources	<a href="http://www.cdc.gov/nceh/ehs/water/wastewater-resources.html">www.cdc.gov/nceh/ehs/water/wastewater-resources.html</a>

inspectors improve their inspection skills and understanding of aquatic facility systems.

Malfunctioning septic systems can contaminate groundwater and surface water, potentially affecting individuals as well as the environment. Environmental health professionals can explore onsite (decentralized) wastewater resources for

environmental health from CDC and partners, including Septic Smart resources from the U.S. Environmental Protection Agency.

As water challenges continue to occur, we hope these resources are helpful to environmental health professionals at all levels (Table 1). 🐼

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## Did You Know?

The mission of the Private Water Network (PWN) is to build a sustainable community for professionals working to protect the public's health from contaminants in private water sources. PWN provides opportunities to connect with peers, access relevant resources, and build capacity. Learn more at <https://pwn.neha.org>.