# Elements of a Water Management Program

Developing and maintaining a water management program is a multi-step, continuous process. The key steps, listed here, are explained in more detail throughout the toolkit with the associated step number appearing on the page where the specific step is discussed.



#### **Program Review**

You need to **review** the elements of your program at least once per year. Make sure you also review and revise your program when any of the following events occur:

- Data review shows control measures are persistently outside of control limits
- A major maintenance or water service change occurs, such as:
  - New construction
  - Equipment changes (e.g., new hot tub chlorinator pump)
  - Changes in treatment products (e.g., disinfectants)
  - Changes in water usage (e.g., high and low season for hotel)
  - Changes in the municipal water supply
- One or more cases of disease are thought to be associated with your system(s)
- Changes occur in applicable laws, regulations, standards, or guidelines

If an event triggers you to review and update your water management program, remember to:

- Update the process flow diagram, associated control points, control limits, and corrective actions
- Update the written description of your building water systems.
- Train those responsible for implementing and monitoring the updated program

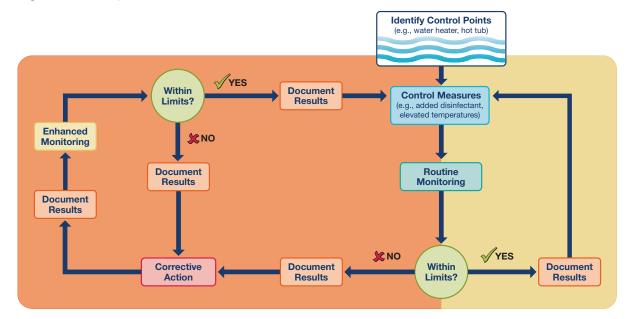
Reference: ASHRAE 188: Legionellosis: Risk Management for Building Water Systems June 26, 2015. ASHRAE: Atlanta. www.ashrae.org

O.

e

### **3** Control Measures & Corrective Actions: The Basics

The diagram below shows the process of implementing and monitoring control measures. If you find that a control limit (i.e., temperature levels, disinfectant levels) is not being met, you need to take corrective actions to get conditions back to within an acceptable range. The right side, in yellow, illustrates the routine process of monitoring control measures to make sure they are within limits. The left side, in orange, shows the process of what to do if control measures are found to be outside of their limits.



Remember, any time there is a suspected case of Legionnaires' disease associated with your building you should:

- Contact your local and/or state health department or work with them if they contact you
- Notify anyone who could be affected by the growth and spread of Legionella in your building if the health department asks you to
- Decontaminate the building water systems if necessary (you may need to get additional help from outside experts)
- Review the water management program and revise it, if necessary

#### **Healthcare Facilities**

In addition to the steps listed above that you would take in all buildings, if a case of healthcareassociated Legionnaires' disease is discovered in a healthcare facility:

- Make sure the person with expertise in infection prevention on your team is aware
- **Important:** Tell clinicians so they can test patients with healthcare-associated pneumonia for Legionnaires' disease with both culture of lower respiratory secretions and the Legionella urinary antigen test

• Report the case to your local and/or state health department; a full investigation may be needed For more details on identifying and investigating Legionnaires' disease cases in healthcare facilities, see page 24.

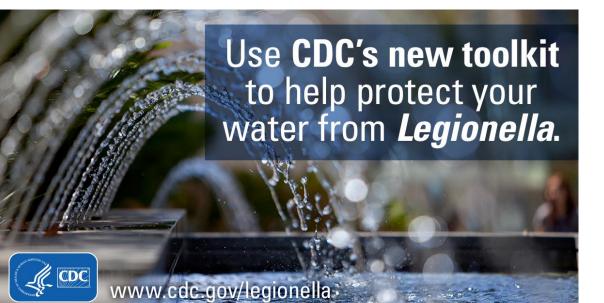
Reference: ASHRAE 188: Legionellosis: Risk Management for Building Water Systems June 26, 2015. ASHRAE: Atlanta. www.ashrae.org





www.cdc.gov/legionella

## Use **CDC's new toolkit** to help protect your water from *Legionella*.





### Use **CDC's new toolkit** to help protect your water from *Legionella*.



CDC





