

#### **POLICY:**

It is the policy of the facility to have a plan to reduce the risk of growth and spread of opportunistic pathogens including Legionnaires' in the building water systems.

#### **Fundamental Information**

Legionnaires' disease is a severe form of pneumonia that often requires hospitalization and is fatal in about 10% of cases overall, and in 25% of healthcare associated cases. Legionnaires' disease is caused by the Legionella bacteria. There are at least 60 different species of Legionella, and most are considered capable of causing disease. (http\\cdc.gov/legionella)

#### TRANSMISSION:

While Legionella is found in natural, freshwater environments, it can become a health concerns in human-made water systems (e.g. plumbing system of large buildings, cooling towers, certain medical devices) where conditions allow it to multiply and come in contact with vulnerable persons. People contract Legionella by inhaling aerosolized water droplets containing the bacteria or, less commonly, by aspiration of contaminated drinking water. (http\\cdc.gov/legionella). Transmission can over via:

- Shower heads
- Cooling towers
- Plumbing Systems
- Certain Medical Devices
- Decorative Foundations

### **Risk Factors:**

- Age  $\geq$  50
- Smoking (current or historical)
- Chronic Lung disease, such as emphysema or COPD
- Immune system disorders due to disease or medication
- Systemic malignancy
- Underlying illness, such as diabetes, renal failure or hepatic failure

This work is licensed under the Creative Commons Attribution-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nd/4.0/.



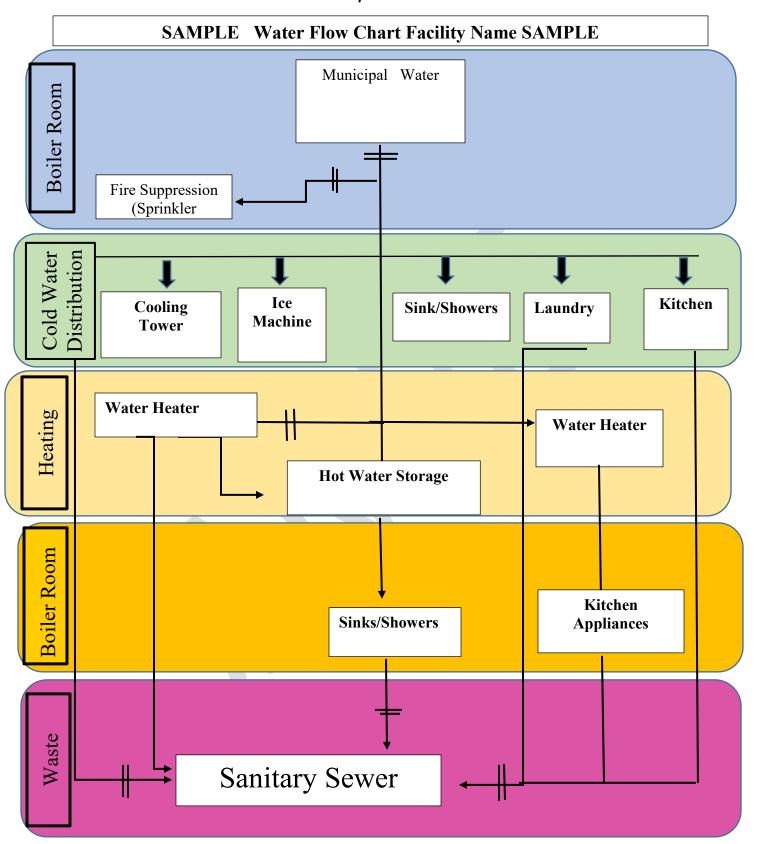
#### **PROCEDURE**

Complete the CDC "Worksheet to Identify Buildings at Increased Risk for *Legionella* Growth and Spread" to identify need for a water management program.

- Create the water management team
- Identify and document the building description, including location, age, uses, and occupants and visitors including the water system description (general summary, uses of water, aerosol-generating devices (e.g., hot tubs, decorative fountains, cooling towers), and process flow diagram).
- Identify vulnerable areas in the system and create a diagram to visually pinpoint areas for monitoring and control.
- Identify control measures, including points in the system where critical limits can be monitored and where control can be applied.
- Confirm procedures are in place, including verification steps to show that the program is being followed as written and validation to show that the program is effective
- Document collection and transport methods and which lab will perform the testing if environmental testing is conducted
- Maintain water heater temperatures per the Federal guidelines and document.
- Prevention measures include:
  - Check shower heads for dripping water and rust. Keep shower heads clean, change as needed and document
  - Clean ice machine according to facility ice machine cleaning schedule, ensure the machine is free of excessive standing water and document.
  - Use sterile water for respiratory equipment and change tubing according to facility policy.
  - In the event of an outbreak follow the Emergency Water Plan Policy located in the Emergency Preparedness Manual.
- If a break in the water integrity system occurs, contact:
  - 1. County Emergency Management:
  - 2. Local Health Officer:
- Notify anyone who could be affected by the growth and spread of Legionnaires' Disease.

This work is licensed under the Creative Commons Attribution-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nd/4.0/.



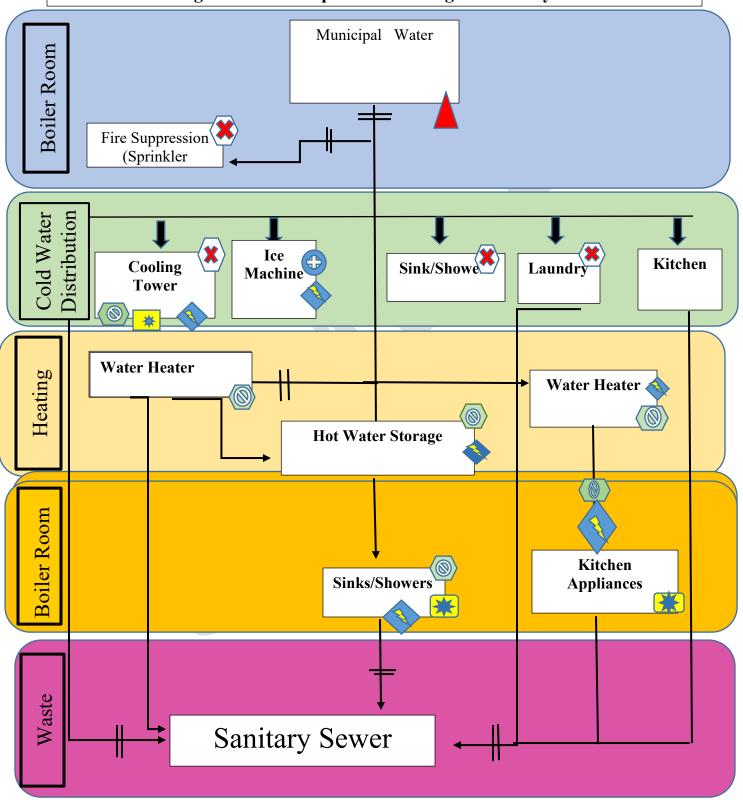


This work is licensed under the Creative Commons Attribution-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nd/4.0/.

This policy and procedure is not intended to replace the informed judgment of individual physicians, nurses or other clinicians nor is it intended as a statement of prevailing community standards or minimum standards of practice. It is a suggested method and technique for achieving optimal health care, not a minimum standard below which residents necessarily would be placed at risk.



## Areas Where Legionella Could spread Flow Diagram Facility Name SAMPLE



This work is licensed under the Creative Commons Attribution-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nd/4.0/.

This policy and procedure is not intended to replace the informed judgment of individual physicians, nurses or other clinicians nor is it intended as a statement of prevailing community standards or minimum standards of practice. It is a suggested method and technique for achieving optimal health care, not a minimum standard below which residents necessarily would be placed at risk.