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EDMUND G. BROWN JR.  
Governor

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AFL 18-39

**TO:** All Facilities

**SUBJECT:** Reducing Legionella Risks in Health Care Facility Water Systems

**AUTHORITY:** Title 42 Code of Federal Regulations sections 482.42, 483.80, and 485.635

**All Facilities Letter (AFL) Summary**

- This AFL notifies hospitals, critical access hospitals (CAHs), and skilled nursing facilities (SNFs) of the requirement to reduce the risks of Legionella in facility water systems, per the Centers for Medicare and Medicaid Services (CMS), Quality, Safety, and Oversight (QSO) 17-30 memorandum.
- Hospitals, CAHs and SNFs must develop and adhere to policies and procedures that inhibit microbial growth in building water systems that reduce the risk of growth and spread of Legionella and other opportunistic pathogens in water.
- Although QSO 17-30 applies to hospitals, CAHs, and SNFs, the memorandum is also intended to provide general awareness for all health care providers.

**Background**

Legionnaires' disease, a serious type of pneumonia, can occur in persons who inhale aerosolized droplets of water contaminated with the bacterium Legionella. Legionella can also cause a milder influenza-like illness called Pontiac fever. Those who are at risk for Legionnaires' disease include persons who are at least 50 years old, smokers, or those with underlying medical conditions such as chronic lung disease or immunosuppression. The rate of reported cases of legionellosis, which comprises both Legionnaires' disease and Pontiac fever, has increased 286% in the United States from 2000 to 2014.

Legionella outbreaks are generally linked to environmental reservoirs in large or complex water systems. Transmission from these water systems to humans requires aerosol generation, which may occur from showerheads, cooling towers, hot tubs, and decorative fountains. Legionella is less commonly spread by aspiration of drinking water or ice. Legionella can grow in parts of building water systems that are continually wet, and certain devices may spread contaminated water droplets via aerosolization. Examples of these system components and devices include:

- Hot and cold water storage tanks
- Water heaters
- Water-hammer arrestors
- Pipes, valves, and fittings
- Expansion tanks
- Water filters

- Electronic and manual faucets
- Aerators
- Faucet flow restrictors
- Showerhead and hoses
- Centrally-installed misters, atomizers, air washers, and humidifiers
- Nonsteam aerosol-generating humidifiers
- Eyewash stations
- Ice machines
- Hot tubs/saunas
- Decorative fountains
- Cooling towers
- Medical devices (such as CPAP machines, hydrotherapy equipment, bronchoscopes, heater-cooler units)

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) published an industry standard, ASHRAE Standard 188-2015, in 2015, which called for the development and implementation of water management programs in large or complex building water systems to reduce the risk of legionellosis. In 2016, the Centers for Disease Control and Prevention (CDC) and its partners developed a toolkit to facilitate implementation of the ASHRAE Standard 188. The toolkit describes environmental, clinical, and epidemiologic considerations for health care facilities and describes considerations for control measures such as physical controls, temperature management, disinfectant levels, visual inspections, and environmental testing for pathogens. (ASHRAE Standard 188-2018 issued August 2018 supersedes ASHRAE Standard 188-2015; however, the ASHRAE 2018 water management-related standards did not change from the 2015 version).

### **Health Care Facility Requirements**

Hospitals, CAHs, and SNFs must have water management policies and procedures to reduce the risk of growth and spread of Legionella and other opportunistic pathogens in building water systems. These facilities must have water management plans and documentation that, at a minimum, ensure each facility:

- Conducts a facility risk assessment to identify where Legionella and other opportunistic waterborne pathogens (e.g. Pseudomonas, Acinetobacter, Burkholderia, Stenotrophomonas, nontuberculous mycobacteria, and fungi) could grow and spread in the facility water system;
- Develops and implements a water management program that considers the ASHRAE industry standards and the CDC toolkit;
- Specifies testing protocols and acceptable ranges for control measures and documents the results of testing and corrective actions when control limits are not maintained; and
- Maintains compliance with other applicable federal, state, and local requirements

The California Department of Public Health (CDPH) expects health care facilities to comply with the CMS conditions of participation and state licensing requirements to protect the health and safety of its patients. SNFs must have a water management plan, which includes a facility risk assessment and testing protocols, available for review. Facilities unable to demonstrate measures to minimize the risk of Legionnaires' disease are out of compliance.

If you have any questions about this AFL, please contact your respective district office. If you suspect or identify a patient or resident with Legionnaires' disease, report to your local public health agency and L&C district office (Title 17, section 2500, and Title 22).

Sincerely,

**Original signed by Scott Vivona**

Scott Vivona  
Assistant Deputy Director

Attachment: QSO-17-30 – Requirement to Reduce Legionella Risks in Healthcare Facility Water Systems to Prevent Cases and Outbreaks of Legionnaires’ Disease (PDF)

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