Water Management

The Centers for Medicare & Medicaid Services (CMS) requires healthcare facilities to have water management policies and procedures to reduce the risk of Legionella and other pathogens in building water systems. The water management program should identify areas or devices in the facility where Legionella might grow and/or spread to staff, patients/residents and visitors and, if identified, mitigate those risks.

Where to begin:

- Establish a water management team. The team should include: Maintenance, Environmental Services, Infection Prevention, Nursing, etc.
- Identify and manage hazardous conditions that support growth and spread of Legionella
- Develop water management policies and procedures, plans, and protocols

Where Legionella Can Grow and/or Spread

Legionella can grow in a facility's continually wet water systems. Certain devices can spread contaminated water via droplets or aerosols*. Examples include:

- Hot and cold water storage tanks
- Infrequently used equipment, including eyewash stations*
- Ice machines*
- Hot tubs*
- Water filters
- Electronic and manual faucets
- Aerators
- Faucet flow restrictors
- Showerheads* and hoses
- Pipes, valves and fittings

- Centrally installed misters*, atomizers*, air washers* and humidifiers*
- Nonsteam aerosol-generating humidifiers*
- Water heaters
- Water-hammer arrestors
- Expansion tanks
- Decorative fountains*
- Cooling towers*
- Medical devices* (such as CPAP machines, hydrotherapy equipment, bronchoscopes)

Measures to Reduce the Risk of Bacterial Growth

- Flush taps/fixtures in vacant rooms (especially in rooms that have not recently been used).
- Assess fixtures such as hand-held showers and faucets with aerators or flow restrictors for sediment or biofilm. Clean surfaces with any visible biofilm (i.e., slime).
- Ensure regular cleaning of ice machines and drinking fountains.
- Ensure cleaning and disinfection of medical devices (such as CPAP machines, room humidifiers, vaporizers, foot baths, etc.) per manufacturer's recommendation.
- Inspect eyewash stations on a routine basis. Activate all eyewash units at least weekly.
- Remove or repurpose high risk features (e.g., water features, decorative fountains). If the team elects to keep decorative fountains, develop a routine maintenance plan.
- Measure water quality throughout the system to ensure that changes that may lead to bacterial growth (such as a drop in chlorine levels) are not occurring.
- Maintain water heaters at appropriate temperatures.
- Eliminate dead legs (unused branches of plumbing that result in stagnation).
- Maintain disinfectant and other chemical levels in cooling towers, hot tubs and swimming pools.

This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/QIN-QIO-0671-10/26/23

