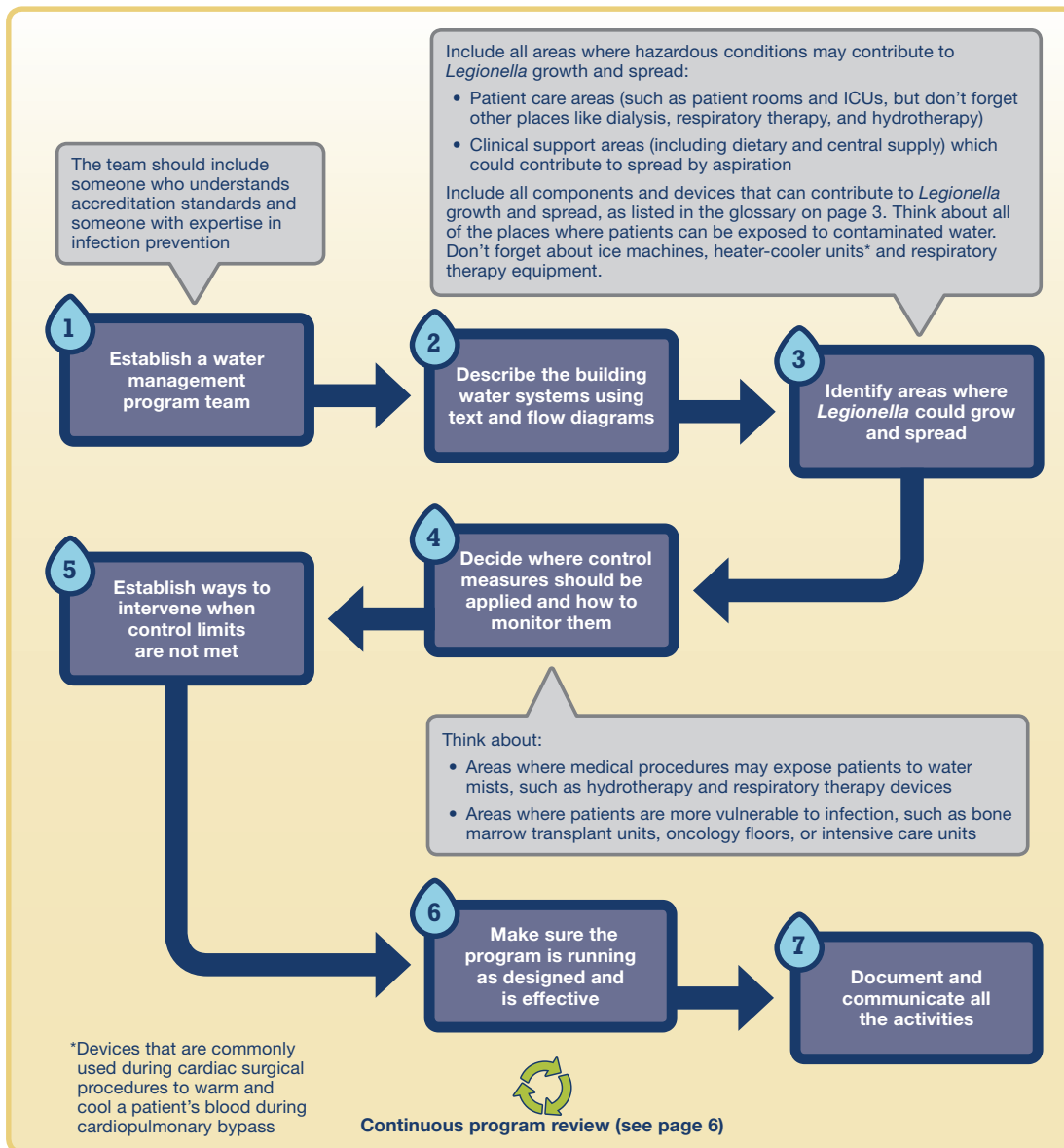


Special Considerations for Healthcare Facilities

ELEMENTS OF A WATER MANAGEMENT PROGRAM

Developing and maintaining a water management program in healthcare facilities requires a few more considerations than the ones explained on page 6. All healthcare facilities should have a *Legionella* water management program.



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

Note: ASHRAE 188 Normative Annex A applies to accredited healthcare facilities that have a Certification Board of Infection Control and Epidemiology (CBIC) certified infection preventionist or a master's-level epidemiologist.

IDENTIFYING & INVESTIGATING LEGIONNAIRES' DISEASE CASES

Healthcare facilities are often uniquely positioned to identify and respond to cases of Legionnaires' disease. A healthcare facility's water management program to limit *Legionella* growth and spread should include the actions to take when a patient is diagnosed with Legionnaires' disease or environmental triggers occur. If you decide to conduct a full investigation of the source of an infection, key elements should be included, as noted below. A full investigation following a diagnosis of Legionnaires' disease can help determine whether the infection was acquired in the facility or the community.

Clinicians should test patients with healthcare-associated pneumonia for Legionnaires' disease. This is especially important among patients at increased risk for developing Legionnaires' disease (see Appendix A), among patients with severe pneumonia (in particular those requiring intensive care), or if any of the following are identified in your facility:

- ◆ Patients with Legionnaires' disease, no matter where they acquired the infection
- ◆ Positive environmental tests for *Legionella*
- ◆ Changes in water quality that may lead to *Legionella* growth (such as low chlorine levels)

The preferred diagnostic tests for Legionnaires' disease are culture of lower respiratory secretions on selective media and the *Legionella* urinary antigen test.

Perform a full investigation for the source of *Legionella* when:

- ◆ ≥ 1 case of **definite** healthcare-associated Legionnaires' disease (a case in a patient who spent the entire 10 days prior to onset of illness in the facility) is identified
- ◆ ≥ 2 cases of **possible** healthcare-associated Legionnaires' disease (cases in patients who spent part of the 10 days before symptoms began at the same facility) are identified within 6 months of each other

Key elements of a full investigation include:

- ◆ Working with local and/or state health department staff
- ◆ Reviewing medical and microbiology records
- ◆ Actively identifying all new and recent patients with healthcare-associated pneumonia and testing them for *Legionella* using both culture of lower respiratory secretions and the *Legionella* urinary antigen test
- ◆ Developing a line list of cases
- ◆ Evaluating potential environmental exposures
- ◆ Performing an environmental assessment
- ◆ Performing environmental sampling
- ◆ Subtyping and comparing clinical and environmental isolates
- ◆ Decontaminating environmental source(s)
- ◆ Reviewing and possibly revising the water management program

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

Note: ASHRAE 188 Normative Annex A applies to accredited healthcare facilities that have a Certification Board of Infection Control and Epidemiology (CBIC) certified infection preventionist or a master's-level epidemiologist.