

ASHRAE 188: Legionellosis: Risk Management for Building Water Systems

Questions and Answers

In 2015, ASHRAE (formerly the American Society of Heating, Refrigerating, and Air Conditioning Engineers) developed a new Standard aimed at preventing the growth and spread of *Legionella*. Created as a voluntary consensus Standard, ASHRAE 188 provides guidance that does not have regulatory authority unless it is incorporated into local building codes, and was developed by a committee comprised of academic, industry, and government subject matter experts. By creating a framework for proactively managing building water systems and reducing the potential for *Legionella* growth in these systems, following this Standard can help building and facility managers prevent many but not all cases of legionellosis.

Q: What does ASHRAE 188 address?

A: ASHRAE 188 defines:

- Types of buildings and devices that need a water management program
- Minimum components of a water management program
- Devices (e.g., hot tubs, cooling towers) that need to be controlled in order to prevent the growth and spread of *Legionella*
- Who should be on a water management program team
- When and how often water management programs should be reassessed and updated

It also includes an annex with special considerations, such as clinical surveillance, for healthcare facilities.

Q: What does ASHRAE 188 not address?

A: ASHRAE 188 does not provide guidance on target water parameters, such as temperature and disinfectant levels. It also does not describe how to perform emergency remediation or give guidance about what to do if cases of disease are associated with the facility.

Q: How does ASHRAE 188 differ from ASHRAE 12 (Minimizing the Risk of Legionellosis Associated with Building Water Systems)?

A: ASHRAE 188 is a Standard that establishes minimum risk management requirements for buildings with complex water systems. Standards are generally incorporated into building codes over time. ASHRAE 12 is a Guideline, which can be viewed as voluntary guidance and supplementary material.

Q: Who is the intended audience of this Standard?

A: The intended audience of ASHRAE 188 includes people who maintain and manage building water systems, including systems for potable (water used for drinking and showering), non-potable, and recreational water. This includes building owners and managers, as well as people who operate, maintain, and repair existing buildings, and people involved in the design, construction, and commissioning of new buildings. The Standard may also be used by health departments or other governmental or regulatory entities to make recommendations about prevention of Legionnaires' disease or in the writing and enforcing of local codes. ASHRAE 188 is not a Standard for single-family or small multi-family residential buildings.

Q: Does ASHRAE 188 require building owners to test for *Legionella*?

A: No. ASHRAE 188 says that members of the water management team can consider whether testing should be performed, and, if performed, that the team should determine the frequency of, locations for, and plans for the response to results of testing. If a program team decides to test for *Legionella* in their water systems, the Standard does not make recommendations regarding:

- Sampling methods
- Test methods
- Number of sites to test
- How often to test

There is no evidence-based consensus recommendation regarding routine testing for *Legionella* for the prevention of legionellosis, as many research gaps exist. However, if testing is performed and *Legionella* is found, a plan should be in place to remove *Legionella* from the water system.

Q: Are healthcare facilities included in this Standard?

A: Yes. ASHRAE 188 applies to healthcare facilities:

- Where patients stay overnight
- Where people with chronic or acute medical problems (e.g. burns, cancer) are housed or treated
- Where people with a weakened immune system are housed or treated
- That primarily house people older than 65 years, with or without on-site skilled nursing staff

ASHRAE 188 also contains special considerations for healthcare facilities. CDC encourages all healthcare facilities to include clinical disease surveillance in addition to environmental surveillance in their legionellosis risk management plans.

Q: Is ASHRAE 188 voluntary or mandatory?

A: ASHRAE 188 is a voluntary consensus Standard that may be adopted into local plumbing codes. If so, enforcement may be performed by the local authority having jurisdiction, so check for local guidance.

Q: How can I get a copy of this Standard?

A: ASHRAE 188 is a copyrighted document that can be [purchased from ASHRAE](#).

Q: What's coming next?

A: Additional details regarding *Legionella* ecology, target water parameters, and procedures for emergency remediation are available in [ASHRAE Guideline 12](#), which is currently under revision to complement ASHRAE 188.

Q: Does CDC have any resources to support development of water management programs?

A: CDC has developed a [toolkit](#) that provides practical guidance on how to implement ASHRAE 188 by identifying areas or devices in buildings where *Legionella* might grow or spread to people so that risk can be reduced through effective water management.

Related Pages

- [A comprehensive water management program for multicampus healthcare facilities](#)
- [HACCP-Based Programs for Preventing Disease and Injury from Premise Plumbing: A Building Consensus](#)
- [Toolkit: Developing a water management program to reduce *Legionella* growth and spread in buildings: A practical guide to implementing industry standards](#)
- [Water safety in buildings\[164 pages\]](#)