Introduction to ANSI/ASHRAE 188-2015
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LEGIONELLOSIS:
Risk Management for
Building Water Systems

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Establish Minimum *Legionellosis* Risk Management Requirements for Building Water Systems
Scope

- For the design, construction, commissioning, operation, maintenance, repair. Replacement and expansion of new and existing buildings and their associated (potable and nonpotable) water systems and components.
- Applies to human-occupied commercial, institutional, multiunit residential and industrial buildings. The standard does not include single-family residential buildings.
- For use by owners and managers of human-occupied buildings, excluding single-family residential buildings.
- For those involved in the design, construction, installation, commissioning, operation, maintenance, and service of centralized building water systems and components.
Health Care Facilities

• Accredited by a regional, national or international accrediting agency or by the authority having jurisdiction over the health care facility Infection Prevention and Control activities.

Or having

• An infection preventionist that is certified in infection prevention control by the Certification Board of Infection Control and Epidemiology (CBIC) or other regional, national or international certifying body or the health care facility has an epidemiologist with a minimum of a master’s degree or equivalent.

**Shall comply with sections of the body of the standard or Annex A.**
Section 4 Compliance

• Building designer requirements
  – Section 5
  – Section 8

• Building owner requirements
  – Section 5
  – Section 6
  – Section 7
  – Review systems yearly for compliance and when modifications made

• Health care facility requirements
  – Section 6
  – Section 7
  – Annex A
Section 5 Building Survey

• Survey for systems covered under the standard
  – Water cooled HVAC&R systems
  – Whirlpools or spas
  – Fountains, water features, misters, humidifiers, air washes or other nonpotable systems releasing water into the air

• Survey for building types under the standard
  – Multiple housing units with central hot water
  – > 10 stories
  – Health care facility
  – Has areas for the purpose of housing or treating at-risk populations (see standard)
  – Buildings for the purpose of housing people over age 65
Section 6  General Requirements

- Principles of a Water Management Plan (WMP)
Water Management Program Team

- Owner or designee
- Employees
- Suppliers
- Consultants
- Risk Managers
- Infection Control
- Identify the responsibilities/tasks
Verification

Develop procedures to confirm that the program is implemented as designed.

Validation

Confirms that the program effectively controls the hazardous conditions (Legionella) throughout the building.
Documentation

• Produce a single document of the plan
• Flow diagrams
• Description of water systems –
  – End point uses, location of water processing equipment, components
  – How the water is received, processed (conditioned stored, heated, cooled, recirculated, delivered)
• Control measures/limits, monitoring/corrective actions
• Equipment maintenance procedure
• Verification schedule
• Validation summary
• Plan for water disruption
Section 7 Requirements

- 7.1 Potable Water Systems
- 7.2 Cooling Towers and Evaporative Condensers
- 7.3 Whirlpools and Spas
- 7.4 Ornamental Fountains and Other Water Features
- 7.5 Aerosol Generating Misters, Atomizers, Air Washers and Humidifiers

➢ Specific to each system type
➢ Outlines aspects to be included in the WMP
Section 8
Requirements for Designing Building Water Systems

• System overview and operation overview
• Document and compliance for hazardous conditions
  – Water systems
  – Code compliance
  – Building water equipment
  – Monitoring
  – Maintenance schedules
  – Etc.
• Actual installation documents
• Balancing
• Commissioning
  – Includes flushing and disinfection
Questions?