Legionella & Digital Mixing

What is Legionella?

Legionnaires' disease is a type of pneumonia that is caused by legionella bacteria.

Causes:

By breathing or aspirating in mist from contaminated water sources such as showerheads, faucets, decorative fountains and other water sources in a premise plumbing system.

How is it treated?

A course of antibiotics as administered by a doctor.

Who is at risk?

People over 50 years of age, current or former smokers, and those with a compromised immune system.

CMS Mandate

Center for Medicaid & Medicare (CMS) issued a mandate in 2017 based on ASHRAE 188 stating that hospitals must comply or risk losing Medicaid and Medicare reimbursements.

If a hospital does not meet the requirements of the CSM Mandate, it risks losing Medicare and Medicaid reimbursements. The Joint Commission can also request to see a hospital's Water Management Plan.

The Cost of Legionella

- 6100 reported cases in 2016 (CDC)
- One in ten Legionnaires' cases leads to death (CDC)
- Legionnaires' disease at a health facility could average **\$38,000** per patient (CDC)
- Legionella is **the number one** cause of waterborne diseases outbreaks in the United States
- Reported settlements and jury awards range from \$255,000 to \$5.2 million.
 (Risk Management Magazine)
- Waterborne illnesses including legionella led to more than 40,000 hospitalizations for a total cost of \$970 million, including \$430 million in Medicare and Medicaid expenses (CDC 2012)
- Adding employee worktime and productivity costs to the direct healthcare costs from legionella the estimated total cost is well over \$1 billion a year (McCoy W, Pearson W. 2011. ASHRAE Standard 188P: Prevention of Legionellosis associated with building water systems)

Establishing a water management program team

Legionella water management program Describing the building water systems using words and diagrams Identifying areas where Legionella could grow and spread

- Deciding where control measures should be applied and how to monitor them
- Establishing ways to intervene when control limits are not met
- Making sure the program is running as designed and effective
- Documenting and communication all the activities



Legionella Mitigation Strategy: Digital Mixing



Intellistation 2[®]

Digital mixing valves allow water to be stored at bacteria-killing temperatures, and mixed to a lower,safer temperature for distribution.

IntelliStation 2 offers:

- Precise, ±2°F temperature control (ASSE 1017 compliant).
- Real-time performance insights and water system condition monitoring both remotely or via touchscreen display.
- High temperature, easy-to-schedule sanitization mode to purge waterborne bacteria.

For more information:

www.watts.com/products/plumbing-flow-control-solutions www.legionella-strategies.com/



- 140 degrees F or hotter is not conducive to preventing scalding
- Water temperature or mixing valves are needed to keep temperature in safe range (106 120)

