

## On-site Legionella qPCR test quickly validates Legionella remediation

## Introduction

- In a 14-year study of Legionella outbreaks, the CDC found that some of the most common settings were long-term care facilities, hospitals, and senior living homes.<sup>1</sup>
- When Legionella is discovered in these facilities, the contaminated water source is disinfected. To validate disinfection, water samples are collected over the next 24-48 hours and shipped to a lab for culture testing.
- The problem is culture typically takes 10-14 days to generate a result, which means patients and residents may continue to be at risk if the remediation was ineffective.
- To solve this problem, Spartan Bioscience has developed the first onsite qPCR test. It provides accurate results in 45 minutes and is the 2018 winner of the HVAC industry's top product innovation award for Indoor Air Quality (IAQ), as judged by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Case Study

- Innovative Water Consulting (IWC) is a leader in providing Legionella remediation services to the healthcare industry.
- In April 2019, a long-term care facility received a positive Legionella culture result from one of its cooling towers.
- IWC immediately investigated the facility with Spartan's test and found that their potable water system was contaminated with Legionella.
- IWC immediately treated the tower with HydroTreat<sup>™</sup>, an advanced oxidizing chemical solution that disinfects a building's water system and inactivates biofilm without corroding the piping.
- After 24 hours, IWC used Spartan's qPCR test to validate the remediation in 45 minutes.

## Conclusion

- Spartan's on-site Legionella qPCR test enabled fast and accurate validation of Legionella remediation.
- The long-term care client was able to minimize human health risk, gain and return to full building operations in 24 hours when typical results take 14 days.

## References

1. Garrison LE et al. (2016). Morb Mortal Wkly Rep. 65(22): 576-584.

"With Spartan, we can immediately validate the effectiveness of Legionella remediation."

- Brian Waymire, CEO



