











## Domestic (Drinking) Water Legionella Reduction Critical Care Hospital

System: Domestic (potable) water

Installed: August 25, 2018

Issues: High legionella counts and biofilm growth Benefits: Reduced legionella counts and removed biofilm

In 2017, when a critical care hospital just south of Salt Lake City, Utah documented legionella counts over 6,000 CFU/mL, the hospital implemented their legionella management plan which included both heating the water above 140°F for more than 30 minutes and lengthy system flushes.

These efforts required downtime, were labor intensive, and posed risks of scalding. Although they reduced legionella counts to 60 to 200 CFU/mL during treatments, the legionella counts returned to previous populations between treatments and there was little or no effect on the biofilm inside the pipes.

On August 25, 2018, the hospital installed the Flow-Tech chemical-free water treatment equipment without system downtime or any inconvenience to the patients or healthcare providers. They discontinued treating their domestic system with hot water, and on October 11, 2018 the Utah Department of Health documented 2 to 3.28 CFU/mL. In less than two months, Flow-Tech had removed the existing biofilm and reduced legionella counts to below the 10 CFU/mL "detectable" threshold.

As a onetime purchase and without any consumables or frequent service required, the non-intrusive Flow-Tech system helped the hospital provide safer drinking water while simplifying their treatment protocol and reducing scalding risks, downtime, and labor.

10/11/2018	Legionella	Total Coliforms	E. Coli
OBS 8	2.00 CFU/mL	<1.0 MPN/100mL	<1.0 MPN/100mL
Room 211	3.28 CFU/mL	<1.0 MPN/100mL	<1.0 MPN/100mL

<sup>\*</sup>Data from tests performed by the Utah Department of Health

Flow-Tech reduced legionella counts by >99.95% compared to no treatment and 98.5% compared to high heat treatment