

Infection Prevention 2020: Minimizes the risk of Legionnaires' disease from sources of shower heads, by continuous disinfection in the shower head - Lidor Zabari - Tel Aviv University

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Legionella is a parasite bacterium, disinfecting the water device does not prevent the spread of legionella within the bathe head. In order to save you the improvement of the Legionella bacteria we must maintain to disinfect the shower head even when water flow stops. In everyday shower heads, as soon as the water stands, the chlorine evaporates, and air enters the system.

Legionella, the bacterium that reasons Legionnaires' sickness, occurs obviously in freshwater environments, like lakes and streams. Generally, the low amounts of these microorganism in freshwater do no longer cause ailment. However, Legionella can pose a health danger when it gets into building water systems. To do this, Legionella first has to grow (boom in numbers). Then it has to unfold through small water droplets (aerosolization) that humans can breathe in. Safe Shower is invented the answer which decrease the threat for Legionnaires' sickness from assets of bathe heads.

Infrequent use of fixtures can efficiently add "dead legs" to a water system. The water leading to and from time to time used tap or shower head may sit down in a pipe at Legionella boom temperature for days or weeks and bacteria growing within the "useless leg" can be shed into the flowing stream. Infrequent use of plumbing furniture, like during a hotel luxury suite for instance, encourages Legionella bacteria to measure in biofilms where they will gain vitamins and be included from disinfectants. Low ranges of chlorine, accumulation of scale and organic material in the shower head create ideal surroundings for Legionella.

When air mixes with water, aerosols are created, the silicon valves prevent air access and decrease the formation of aerosols and scale. Legionella is transmitted via inhalation of water droplets from a contaminated source. All the existing solutions inclusive of filters or Washing water pipes with high tiers of chlorine are solutions that do not paintings continuously.

This patent will save a top notch deal on motel and hospital costs, save at the wide variety of instances maintenance employees destroy the bathe heads and soak the shower head in chlorine bucket-Regulatory requirement, store some of repetitive samples due to much less Legionella-wonderful lab results, save on lawsuits for warding off accidental Legionella and financial savings in preventive actions like disinfecting the water device in instances of Legionella positive results. But maximum importantly, it will save lives.

Air is avoided from getting into the bathe head by the use of Mini silicon valves which limit publicity to aerosols that transmit the Legionella, limit chlorine oxidization, and limit formation of scale and natural sediments. The silicon valves like any backflow prevention tool lessen downstream water pressure, saving a mean of 10% of water consumption. We presently have a running chlorine prototype and we are now developing a UVC LED totally based product with a tiny 30mm disinfection unit.

Safe Shower invented a completely unique bathe head, patent based totally, that minimizes the danger of Legionnaires' disease from sources of shower heads, By continuous disinfection within the bathe head, with a small sized disinfection unit (which include chlorine pill or UV unit).

Legionella is a parasite bacterium, disinfecting the water gadget does now not prevent the spread of legionella in the shower head. In order to save you the development of the Legionella microorganism we have to hold to disinfect the bathe head even when water go with the flow stops. In regular bathe heads, once the water stands, the chlorine evaporates, and air enters the system.

Legionella, the bacterium that causes Legionnaires' disease, occurs certainly in freshwater environments, like lakes and streams. Generally, the low amounts of those microorganism in freshwater do now not cause sickness. However, Legionella can pose a health threat whilst it receives into building water systems. To do this, Legionella first has to grow (boom in numbers). Then it has to unfold via small water droplets (aerosolization) that humans can breathe in. Safe Shower is invented the answer which minimize the danger for Legionnaires' sickness in Hotels, Hospitals and Other institutions from assets of bathe heads.

Infrequent use of furniture can correctly add "useless legs" to a water machine. The water leading to an on occasion used faucet or bathe head might also sit in a pipe at Legionella increase temperature for days or even weeks and microorganism growing inside the "lifeless leg" can be shed into the flowing stream. Infrequent use of plumbing furniture like during a inn luxury suite for instance, encourages Legionella bacteria to measure in biofilms wherein they will acquire nutrients and be shielded from disinfectants.