

The health risks of hard water and limescale

Limescale deposits lead to a constant threat of biofilms, algae and harmful bacteria, especially Legionella disease.

Biofilm, algae, and Legionella

Various types of bacteria thrive on limescale deposit surfaces. The best known among them is Legionella, which finds an ideal breeding ground in warm water with temperatures between 25°C and 50°C.

In parts of a water system that have low pressure or stagnating flow due to heavy scale build-ups, there is a high risk bacteria will form biofilm that is very difficult to remove, potentially causing serious health risks. Places ideal for growth of bacteria include hot water tanks, large air conditioning systems in hotels, office buildings and hospitals; cooling towers in industrial cooling systems; hot water systems, jacuzzi and spas; showers, room air humidifiers and cruise ships.

Treatment with Aqua

The most effective way to avoid Legionella is to prevent scale buildup in pipe systems and on heat transfer surfaces. Keeping water temperature above 50°C, ideally at 60°C, and making sure it is equally transferred through the entire building, is the safest way to eliminate bacteria. Without effective hard water protection, however, scale may accumulate rapidly and multiply operational issues. Aqua prevents scale buildups and minimize risks of developing Legionella bacteria, while keeping your system operating at full capacity and enabling naturally healthy water.

Eczema and dermatitis

Various researches indicate that exposure of the skin to hard water can result in harming its barrier, increasing accordingly sensitivity of the skin to the products that are used on daily basis as soap and washing products.

Skin pH is acidic, while hard water contains a high level of alkaline, meaning it can elevate the skin surface pH. With increase of alkaline pH, the skin becomes more vulnerable to potential bacteria, increasing a risk for infections, development of eczema (dry itchy red rash) and dermatitis (dry swollen discolored skin).

Treatment with Aqua

Aqua water softening process keeps water alkaline level low, protecting directly skin natural pH and keeping it soft. People with sensitive skin, especially small children, benefit largely from naturally soft water that contains minerals.