

# Facts on Legionella

## **What is Legionella?**

Legionella is a bacterium which causes a type of pneumonia called Legionnaire's Disease. It can also cause a flu-like illness called Pontiac Fever. Several species of Legionella can cause disease in humans, but the most important one is Legionella pneumophila.

## **Where does Legionella come from?**

Legionella is commonly found in the environment, especially in soil and natural and man-made water systems (e.g. rivers, lakes, water storage cisterns and tanks, cold and hot water systems, cooling towers). Some species of Legionella grow very well in warm water (up to 50 °C), particularly where there are sufficient nutrients or corrosion products and slimes.

## **How does Legionella spread and cause disease?**

Legionella does not cause illness through ingestion. For it to cause Legionnaire's Disease the bacterium must be inhaled in sufficient numbers in a fine water vapour aerosol deep into the lungs of a susceptible person. Therefore, the bacterium must first multiply to large numbers in a water body that is then allowed to form an aerosol. This is typically the case with cooling towers, with which outbreaks of Legionnaire's Disease are commonly associated. Other sources of outbreaks include whirlpool spa-type baths, coldmeat misters, showers in large buildings, and fountains.

## **Are there standards for Legionella?**

There are no specific standards for Legionella, but there is a statutory requirement for owners or managers of buildings that contain equipment that can allow Legionella to grow and be spread (e.g. cooling towers and humidifiers). They must ensure such equipment is maintained to ensure that Legionella is not present in numbers that may pose a health risk. There are several publications giving guidance on this. There is no standard for Legionella in drinking water, nor any requirement for their removal.

## **Is Legionella in drinking water a problem?**

No. Elimination of Legionella from water supplies is not deemed necessary because the numbers found are low and do not present a health risk when ingested or used for domestic purposes. Consequently the established route for preventing outbreaks of disease is through prevention of growth of these bacteria in facilities that generate aerosols. Potable water supplies are not considered to be the primary route by which facilities such as cooling towers become contaminated.

## **How is Legionella controlled?**

By ensuring that equipment that can allow Legionella to grow and be spread (e.g. cooling towers and hot water systems) are maintained as outlined by the Health and Safety Executive document HS(G)70 The Control of Legionellosis including Legionnaire's Disease.