

Legionella Control Products & Services

Legionella control

Products & Services

Legionella risk assessment

Legionella analysis

Legionella training

Disinfection services

Water hygiene

Log books

Activ-Ox® chlorine dioxide

Who uses our services?

Hospitals

Hotels

Facilities Managers

Building services

Dental practices

Manufacturing (all types)

Food Processing

Which risk systems?

Hot & cold water systems

Cooling water systems

Spa pools

Spray humidifiers

Misters

Air washers

Wet scrubbers

Safety showers

Irrigation sprinklers

Vehicle wash systems

Fountains and water features

And many others!

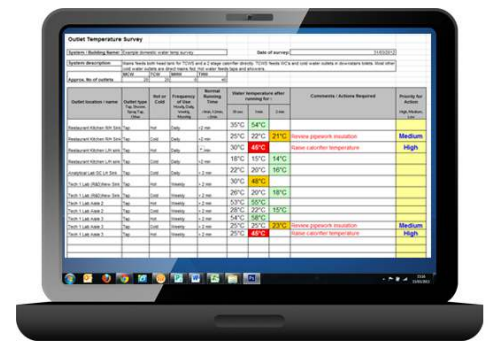
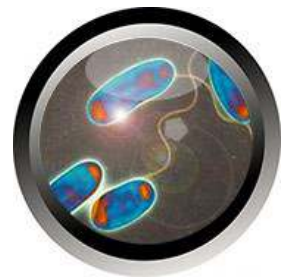
Legionella Control Services for International Clients

Legionnaire's Disease is a form of pneumonia caused by inhaling tiny water droplets (aerosols) which are contaminated with legionella bacteria. It is often fatal, but is wholly preventable. Any water system where water is ever stored or used below about 55°C and is then released as a spray is a potential legionella risk.

Feedwater has been providing products and services to control legionella for over 30 years indeed we we're preventing Legionnaires' Disease before most people had even heard of it.

Legionella Risk Assessment Service

The control of legionella starts with a risk assessment to identify those water systems which have the potential to encourage the growth of legionella and to develop a programme of appropriate control measures. Whilst, we can provide guidance on how to do this from the UK many of our overseas customers prefer a Feedwater Consultant to visit to survey their site and to carry out this risk assessment for them. The risk assessment report which is produced is easy to read, to the point and comprehensive yet concise, focussing on what you need to know. It can be used as an effective management tool to reduce risk and monitor improvement.



Legionella Water Analysis

Whilst a legionella risk assessment may identify the potential for a water system to become a breeding ground for legionella bacteria the only way you really know whether a system is contaminated is to actually test the water. This is a highly specialised test that has to be carried out by skilled technicians in a suitably equipped laboratory.

Our UKAS accredited laboratory is a centre for excellence in Legionella control and analyses thousands of samples every year using internationally approved methods. For our international customers we provide instructions and sampling packs to enable them to collect the samples themselves and then ship them to our UK laboratory by courier. The results are available 7 to 14 days later and if any urgent action is necessary we will contact you directly to discuss it.

Activ-Ox® Chlorine Dioxide Systems

One of the best control measures for preventing the growth of legionella in a water system is to ensure that the cold water is always kept below 20C, the hot water is genuinely hot and warm water conditions are avoided. In many hot countries this is almost impossible and the resulting warm water can become a breeding ground for the bacteria.

If that describes some of your water systems then you need Feedwater's patented chlorine dioxide system Activ-Ox®. Activ-Ox is a powerful disinfectant which will kill legionella bacteria and the biofilms they thrive in and is the easiest and safest way to treat drinking, and domestic hot and cold water in buildings such as hotels, hospitals and office blocks.

Advice and technical support

All our international customers for legionella control services have access to our team of specialists for expert advice and technical support. We can provide example policies, procedures for disinfection and managing the risk, record keeping log books etc.

We are passionate about preventing Legionnaires' Disease and were founder members of the UK Legionella Control Association.

To find out more about Legionnaires' Disease and its prevention please read the reverse of this leaflet and visit our website.

What is Legionellosis and Legionnaires' Disease?

Legionnaires' Disease is a form of pneumonia caused by inhaling tiny water droplets (aerosols) which are contaminated with legionella bacteria. It is often fatal, but is wholly preventable. Legionellosis is the name given to a range of illnesses caused by legionella bacteria; as well as Legionnaires' Disease they include Pontiac and Lochgoilhead fevers which are milder flu-like illnesses.

How do you get legionella in water systems?

Legionella bacteria are commonly found in natural water systems such as rivers and lakes where their numbers are usually low and they pose little risk. They grow over a temperature range of 20°C to 45°C. Below this temperature they survive dormant and as the temperature rises above 50°C they are progressively killed off and will not survive long at temperatures above 60°C. Their ideal growth temperature is around human body temperature, 37°C! Whilst legionella are widely found in the natural environment the risk comes when they contaminate man-made water systems, entering at low levels in the incoming water supply or in air-borne aerosols. Many man-made water systems not only provide the ideal environment for legionella to multiply but also involve water sprays which can release dangerous aerosols into the atmosphere.

What does legionella need to thrive?

As well as a water temperature of 20°C to 45°C legionella bacteria need a supply of nutrients which are usually provided by other microbes which are commonly found in the water. In particular there is a strong relationship between biofilms (microbial slimes), amoebae and the growth of legionella. Biofilms flourish in warm, stagnant water. As a general rule legionella likes dirty systems which are fouled with corrosion products and scale and dislikes clean water systems.

Breaking the Chain!

There is a four step chain of events which need to take place for someone to catch Legionnaires' disease and which provide the basis of assessing and minimising the risk. If this chain is broken at any point you will prevent Legionnaires' Disease.

Step 1 – A water system becomes contaminated with legionella bacteria

Certain water sources, such as untreated river or canal water, are more likely than others to contain legionella bacteria and will therefore increase the risk. However, it is not safe to assume that a treated incoming water supply is free from legionella and indeed you should assume that all water systems will become contaminated with low levels of legionella at some point.

Step 2 – Legionella multiply within the water system

Whilst it may be almost impossible to prevent a water system being contaminated with low levels of legionella it is entirely possible to prevent them multiplying to dangerous levels and it is important therefore to devise control measures to control their growth. The nature of those control measures will vary from system to system. In the case of domestic water systems this will involve keeping the hot water hot and the cold water cold and avoiding warm water conditions or if that isn't possible dosing a chemical disinfectant like Activ-Ox®. In the case of a cooling tower this will involve an effective chemical water treatment programme. In all cases it will involve trying to avoid stagnant water conditions and keeping the water system clean and free from a build-up of deposits.

Whilst addressing all of the links in the chain is important, preventing legionella multiplying is undoubtedly the most important.

Step 3 – Contaminated aerosols need to be released to the atmosphere

It doesn't matter how many legionella a water system contains if they are never released as an aerosol that someone can breath-in. A legionella risk assessment should therefore consider what the potential is for aerosols to be produced during both normal and abnormal usage (such as maintenance). Aerosols are generated by water sprays, air bubbles bursting through the water surface and by water splashing against a hard surface. In certain instances it may be possible to eliminate the risk by eliminating the process that produces the aerosol, or by reducing the quantity of aerosols that are released, but in many instances such as a domestic shower that isn't possible and therefore the risk has to be minimised by focussing on preventing the multiplication of legionella within the water system.

Step 4 – Susceptible people inhale contaminated aerosols

The final step in the chain is for a susceptible person to breath-in enough contaminated aerosols to cause legionellosis. Individuals' susceptibility varies and there are a number of factors which increase it:

- Men are 2 to 3 times more susceptible than women
- Increasing age - (people over 45 are generally more susceptible)

Existing poor health - Smoking, alcoholism, diabetes, cancer, respiratory conditions etc.

A risk assessment needs to consider whether the population who potentially might be exposed are particularly susceptible, such as a hospital or elderly persons home, and whether the location of the system means there is greater potential for more people to be affected such as a city centre.