

# Cedek

## WATER HYGIENE

- Simple Guide to Legionella
- Legionella Control
- Systems at risk
- Cedek's Legionella Risk Assessment
- Cedek's Sampling & Testing Services
- Examples of Lab & Workshop Testing
- Controlling Legionella Bacteria
- Responsibilities



## AN INTRODUCTION



Cedek offer professional Water and Legionella Control Risk Assessments & Testing on all Hot and Cold Water Systems. To keep our clients compliant with current UK regulations including Health & Safety at Work Act, COSHH and ACOP L8.



# Simple Guide to Legionella

## WHAT IS LEGIONELLA?

- A naturally occurring bacterium
- Found in most water systems
- Often present in mains water
- Easily colonises most domestic water systems hot and cold

## WHAT IS LEGIONNAIRE'S DISEASE?

- Potentially fatal form of pneumonia 5-30% fatality rate
- 200-300 cases of infection in England & Wales annually
- Incubation period 2-10 days typically 3-6 days
- Legionella pneumophila 23 sub types
- HSE view Legionnaire's Disease as "**preventable**" assuming management failure

## •WHAT IS THE ROUTE FOR INFECTION?

- Primarily through inhalation of aerosols, fine droplets & mists
- It can be contracted by choking on contaminated water
- Statically most susceptible 50-70 year old male smokers

## WHAT ARE THE REQUIRMENTS FOR GROWTH?

- Optimum temperature range of 20-45 0C
- Food source other bacteria & sediments such as algae
- Prefers stagnant conditions



# Legionella Control

There have recently been a number of high profile cases of Legionnaires disease. All businesses have an obligation to take the correct measures to protect their staff, customers and the public against the risk of Legionnaires disease. The Code of Practice and Guidance called L8 was designed to help businesses meet their legal obligations.

Legionnaires disease has become a major health and safety issue. Cedek have the knowledge and experience to ensure that our clients comply with Government legislation. Cedek can provide risk assessments, laboratory testing, remedial works and safe treatment programmes to protect against Legionella.

		Risk Assessment	Water treatment	HSC Monitoring & Inspection	Cleaning & Disinfection	Independent consultancy	Training	Off-site Analytical (more)	Equipment, design & supply, install, rehab & service	Facilities management
Legionella Awareness Microbiology and origins of Legionella	L	2	2	2	1	3	4	2	1	1
	M	3	3		2	4	4	3	2	2
	H	4	4		3	4	4	4	3	3
Legionella legislation and Regulation	L	2	2	2	1	3	4	1	1	1
	M	3	3		1	4	4	1	2	2
	H	4	4		1	4	4	1	3	2
Microbiological sampling of water	L	2	2	2		3	4	2	1	1
	M	2	2			4	4	2	2	1
	H	3	3			4	4	2	2	1
Microbiological analysis methods	L	1	1			2	4	1		
	M	1	1			3	4	1		
	H	1	1			3	4	1		
Microbiological sampling strategy, interpretation & reporting	L	2	2	3		3	4	2	1	1
	M	3	3			3	4	3	2	1
	H	3	3			4	4	3	3	2



**Legionella Risk Assessments**

to control the risks presented from legionella and other water borne bacteria, the Approved Code of Practice, L8, confirms the need to undertake a full assessment of the risk

[learn more](#)



## Typical Systems At Risk

- Swimming Pools and Hot Tubs/Spa Pools
- Domestic Hot & Cold Water Systems
- Water features incl. Ornamental Fountains
- Equipment producing Aerosols, Mists or Droplets from stored Water Sources including Showers & Humidifiers
- Equipment holding/circulating water at 20- 45°C such as Central Air Condition



# Cedek's Legionella Risk Assessments

Regulatory requirements (ACOP L8) specify that employers and those with responsibility for the control of premises should carry out a risk assessment on all water systems. This is to establish the risk of proliferation of Legionella bacteria.

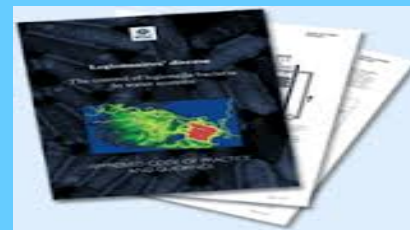
Cedek Engineers conduct Legionella risk assessments and provide instruction on how to satisfy ACOP L8 requirements.

Cedek's risk assessment includes identifying and quantify relevant wet systems plus the equipment holding and circulating water, assess the potential for Legionella growth, identify who is at risk, assess the potential for bacteria transfer, quantify and prioritise the risks and determine suitable means of control.

Cedek's assessments include written reports, photographic supporting evidence, water system schematics and a water assets register.

After analysing the system Cedek will if required suggest a programme of management and monitoring.

Cedek present the findings in a full documentation with recommendations and action to be taken.



# Cedek's Sampling & Testing Services

Cedek offer a comprehensive chemical and microbiological analytical service of which with our knowledge and understanding can ensure a service of the highest professional and technical standards.

## **Microbiological**

- Full range of routine regulatory microbiological parameters
- Legionella analysis
- UKAS accredited laboratory services

## **Chemical**

- Physical tests
- Metals
- Scale and deposits

## **All analysis is in compliance with appropriate European and UK Legislation and guidelines including**

- Water Supply (Water Quality) Regulations
- Private Water Supply Regulations
- Microbiology of Drinking Water – Water Quality and Public Health
- Use of UKAS accredited laboratory services



# Cedek's Examples of Lab & Workshop Equipment

- Taps and Showers
- Spray Taps
- Water Recirculation Systems for Cooling
- Cooling Towers
- Misting Equipment
- Dentistry Tools
- Oil/Water Emulsions for Lubricating Lathes
- Mobile AC Equipment with Water
- Swimming Pools
- Air-conditioning



# Controlling Legionella Bacteria

- Temperature monitoring
- Controlled release of water spray
- Avoid temp, conditions 20 – 45°C
- Avoid water stagnation empty and clean regularly
- Avoid materials which harbour bacteria
- Maintain cleanliness of spray outlets
- Water treatment where necessary
- Ensure correct & safe operation of system
- Flushing regime for rarely used outlets



# Responsibilities

## FOR THE EMPLOYER

- Statutory Duty Holder who is ultimately responsible for Legionella Risk
- Appointed Responsible Person for day to day management
- Policy control of Legionella bacteria
- Management structure in place with Contractors charged with carrying out: Legionella Risk assessments of all areas or equipment, treatment of water assets where required, sampling and analysis of water systems, remedial works



# Legionella Checklist

In order to take the proper measures to protect your staff, customers and the public against the risk of Legionnaires Disease which is controlled by UK Health and Safety Legislation and the Code of Practice and Guidance L8 which is designed to help businesses meet their legal obligations. The guidance includes **risk areas**.

**Checking conditions will not encourage Legionella bacteria growth.**

**Maintaining records of when and where temperature checks were taken.**

**Providing schematic drawings of your plumbing system.**

**Having a person specifically responsible for overseeing Legionella compliance.**

To find out if you currently comply please see the water check list below.

Cedek currently work with many companies in the UK making sure they are aware of their responsibilities ensuring that the risk from exposure to Legionella is properly controlled.

**Below is a checklist to see if you currently comply:**

1. Does your water system comply with the water supply (water fittings) regulations 1999?
2. Can you demonstrate that you follow the Health & Safety Approved Code of Practice (L8) with regard to Legionella control?
3. Have you undertaken a risk assessment with regard to Regulations and Legionella in the last 2 years?
4. Can you remember the last time you undertook an inspection of your hot and cold water system?
5. Are records of samples, temperature checks and inspections recorded in a log book?
6. Do you chemically dose your hot or cold water systems at least once a year?
7. Have you made any alterations to your hot and cold water systems?
8. Do you employ a contractor who specialises in Legionella control?
9. Do you have up to date schematic drawings of the hot and cold water systems at your premises?
10. Have you nominated someone to take responsibility for the hot and cold water systems at your premises?

# Legionella Control Association (LCA)

The Legionella Control Association (LCA) is a voluntary organisation whose membership comprises providers of services and products concerned with the control of legionella bacteria in water systems. The primary aim is to keep water systems safe and minimise the risk of cases of Legionnaires' disease caused by poorly maintained systems.

The membership of the LCA comprises service providers, manufacturers, installers and consultancies which offer products and services associated with the control of legionella in water systems as listed below:

- Risk assessment
- Water treatment
- Hot and cold water monitoring and inspection
- Cleaning and disinfection
- Water services consultancy
- Training
- Water analytical services
- Supply and refurbishment of plant and equipment
- Facilities management

The membership is now over 250 organisations who have satisfied the registration requirements of the LCA and re-register annually. Membership is voluntary but is seen across the industry as increasingly important in demonstrating a commitment to high standards of service. Many public and private tenders for water system services now require bidders to be registered with the LCA.



# CEDEK HEALTH & SAFETY

Cedek Commissioning & Servicing Engineers are fully qualified in HABC Level 2 in Legionella Awareness in Hot & Cold Water Systems, Cooling Towers & Evaporative Condensers. FTT Confined Space Safe Practice with the use of Gas Detection and full BA Escape Equipment. Manual Handling Trained. Risk Assessment Trained and IOSH Managing Safely certified.

Cedek comply and follow with all of the Health & Safety COSHH Procedures and ACOP L8.



# Cedek Water Treatment Ltd

IF YOU WOULD LIKE MORE INFORMATION OR WOULD LIKE TO MEET WITH US PLEASE CONTACT; Steph on 07791019464

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