



Legionnaires' Disease what it is & how to prevent it...

Legal responsibilities & assessing the risks

If you are the employer or person in control of premises, you must organise a risk assessment from exposure to legionella. The revised Approved Code of Practice (ACOP) Legionnaires' disease: Control of Legionella Bacteria in water systems (L8) issued by the Government's Health and Safety Executive (HSE) significantly extends the scope of its guidance on control of legionella bacteria in water.

The code applies to all hot and cold water systems in the workplace regardless of their capacity, i.e. the lower limit of 300 litres previously used to exclude domestic systems, no longer applies. Whilst domestic systems may represent a risk, the code only applies to a risk arising from a work activity. This means that all employers, who manage premises with hot/cold water systems and/or wet cooling systems, have a legal responsibility to identify any risk of contamination and to prevent or control it. These records have to be kept for a minimum of five years.

What is Legionnaires' disease?

Legionnaires' disease is a potentially fatal form of pneumonia. The cause of the disease is a bacterium called *legionella pneumophila*.

How is it caught?

Legionnaires' disease is caught by inhaling small droplets of water suspended in the air which contain the legionella bacterium, e.g. spray from showers and taps.

What are the sources of legionella bacterium?

<u>risk areas</u>

residential accommodation **hotels** schools universities care homes hostels colleges dentists **nursing homes** guest houses holiday homes business premises **hospitals** campsites **leisure centres**



The legionella bacterium is found mainly in stagnant water, e.g. ponds and rivers or buildings containing cooling tower, evaporation condensers, air conditioning and industrial cooling systems, humidifiers, spa baths and hot and cold water systems.

What areas are most vulnerable?

A wide range of workplaces, but particularly residential accommodation managed privately or by organisations, e.g. local authorities, universities, hospitals, nursing and care homes, housing associations, charities, hostels, private landlords, managing agents, hoteliers and holiday accommodation providers, including guest houses and camping/caravan site owners.

Who is most at risk?

People most at risk are people over 45, smokers and heavy drinkers, diabetics and people who are already ill, particularly with chronic diseases or whose immune system is impaired.



Incorrect water temperature is a key risk factor for legionella growth. The legionella bacteria multiply in water at temperatures between 20 to 45 °C. A typical method of control is to store hot water above 60 °C and distribute it at above 50 °C (care must be taken to prevent scalding). Cold water should be kept below 20 °C.

'Incorrect water temperature is a major contributor for legionella growth'



Legionnaires' temperature monitoring kit

- Therma 1 high accuracy thermometer & three probes
- FREE traceable certificate of calibration

The Legionnaires' temperature monitoring kit represents excellent value for money as each one is supplied in a FREE carrying case and also includes a FREE mini tub of 70 ProbeWipes.

The kit includes a Therma 1 digital thermometer which is a rugged and easy to use instrument that operates through the range of -99.9 to 1372 °C with a 0.1 °C or 1 °C resolution. The thermometer is housed in a robust ABS case that contains 'Biomaster' additive that reduces bacterial growth.

The Therma 1 features a large, easy to read, LCD display with open circuit 'Err', hold and low battery indication and is powered by three AAA batteries that give a minimum of five years battery life. The unit will power off automatically after ten minutes, maximising battery life. This feature can be disabled by the user, if required.

Legionnaires' thermometer kit

each kit contains:

- Therma 1 thermometer (221-041)
- penetration probe (123-160)
- precision ribbon surface probe (123-030)
- PTFE wire probe (133-362)
- water resistant countdown timer (806-150)
- mini tub of 70 ProbeWipes (836-022)
- ABS carrying case (834-150)



optional accessories

- protective silicone boot the Therma 1 is splashproof to IP64 when used in conjunction with this boot. Various colours are available
- stainless steel wall bracket (screws not supplied) and protective black silicone boot (832-053)
- for alternative type K thermocouple probes for the Therma 1 thermometer see overleaf

order code	description	£ each
860-860	Legionnaires' thermometer kit	125.00
830-227	protective silicone boot - black	6.00
832-225	s/steel wall bracket & boot	12.00



MAX

°C/°F

HOLD

AUTO

Therma 1

00:00a

ProbeWi

ETI.

ermometer k

Therma 1 Thermometer Probes

for industrial processes & building maintenance

		order code	£ each
Ø3.3 x 130 mm	This stainless steel penetration probe is strong, versatile and ideal for measuring a wide variety of applications including liquids and semi-solids. Response time less than three seconds. Probe temperature range -75 to 250 °C.	123-160 323-160 (coiled lead)	27.50 28.50
Ø3.3 x 130 mm	This stainless steel, waterproof penetration probe is strong and versatile and incorporates a heavy duty ribbed handle. Suitable for general purpose applications including liquids and semi-solids. Response time less than three seconds. Probe temperature range -75 to 250 °C.	143-162	30.00
fast response probe	This reduced tip, fast response, stainless steel penetration probe is ideal for liquids or semi- solids i.e. soft rubber and other similar materials. Response time less than two seconds. Probe temperature range -75 to 250 °C.	123-159 323-159 (coiled lead)	30.50 31.50
ribbon surface probe	This precision, ribbon surface probe utilises flat ribbon technology that ensures a fast, accurate response with minimal heat loss. Response time less than 0.5 of a second. Probe temperature range -75 to 250 °C. A right-angled version is also available.	123-030 123-032 (right-angled)	38.00 42.50
PTFE wire probe Image: Solution of the second se	This PTFE insulated, exposed junction wire probe is suitable for measuring the air temperature in areas where water is stored i.e. plant rooms. Response time less than 0.5 of a second. Probe temperature range -75 to 250 °C.	133-362 (1000 mm) 133-363 (2000 mm)	7.50 8.50
Ø2.4 x 1000 or 2000 mm	This heavy duty, PTFE insulated wire probe is ideal for measuring the air temperature in areas where water is stored i.e. plant rooms. Response time less than 0.5 of a second. Probe temperature range -75 to 250 °C.	133-372 (1000 mm) 133-373 (2000 mm)	11.00 13.00
magnet surface probe	This magnet probe is supplied with a 500 mm PTFE lead. Ideal for monitoring the surface temperature of ferrous metals, e.g. radiators or hotplates. Response time less than 20 seconds. Probe temperature range -20 to 80 °C.	133-017	31.50
velcro pipe probe	This 500 mm wrap-around velcro pipe probe is suitable for medium and large pipe temperature measurement in the HVAC industry. Supplied with a two metre lead. Response time less than 20 seconds. Probe temperature range -10 to 100 °C.	133-080	24.00

For more information and our full range of probes and accessories telephone our sales office on 01903 202151 or visit our website. Alternatively if you require a special probe design, please call our technical sales team.

All prices exclude carriage & VAT and are valid until 31st December 2016



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