

Essential information for providers of residential accommodation



Legionnaires' disease

What is this leaflet about?

The revised Approved Code of Practice (ACOP) and guidance *Legionnaires' disease: The control of legionella bacteria in water systems* has some important changes that could affect you as a provider of residential accommodation. This short guide will help you understand what these changes mean for you, and the action you will need to take to ensure that the risk from exposure to legionella in the premises you are responsible for is properly controlled. To do this you will need to consult the ACOP and guidance for further detail on managing and controlling legionella risks (see 'Where can I get further information?' at the end of this leaflet).

Who is this leaflet aimed at?

A wide range of organisations, groups or self-employed individuals providing residential accommodation who are responsible for the water system(s) in their premises, including:

- local authorities;
- universities;
- housing associations, including housing companies;
- charities;
- hostels;
- landlords in the private renting sector;
- managing agents;
- hoteliers, B&B, guest house and holiday camp owners; and
- caravan and camping site owners, including fixed caravan sites.

As a provider of such accommodation you may already be aware of your responsibilities to ensure that the risk from exposure to legionella in your premises is properly controlled. **However, some of you may not be aware of the legal requirements that are outlined in the revised ACOP.** You may have to assess the risk from exposure to legionella to your own staff, guests and customers, and any other people working in your premises, and introduce appropriate control measures.

Ask yourself:

- **If a boiler, tap or shower head breaks/leaks who is responsible for getting it repaired?**
- **If it is you, then you need to be aware of the legal requirements in this guidance.**

Even if you have passed on responsibility for maintaining your property, through an agreement with a third party, you cannot delegate these responsibilities.

What is legionella and Legionnaires' disease?

Legionella are bacteria that are common in natural (rivers and lakes etc) and artificial water systems, eg hot and cold water systems (storage tanks, pipework, taps and showers). We usually associate legionella with larger water systems, eg in factories, hotels, hospitals and museums, and cooling towers, but they can also live in smaller water supply systems used in homes and other residential accommodation. Other potential sources of legionella include spa and whirlpool baths, humidifiers (in factories) and fire-fighting systems (sprinklers and hose reels). Legionella can survive in low temperatures, but thrive at temperatures between 20°C and 45°C. High temperatures of 60°C and over will kill them.

Legionnaires' disease is a potentially fatal form of pneumonia caused by the legionella bacteria. It can affect anybody, but some people are at higher risk including those over 45, smokers and heavy drinkers, those suffering from chronic respiratory or kidney disease, and people whose immune system is impaired.

Legionellosis is the collective name given to the pneumonia-like illnesses caused by legionella bacteria, including the most serious and well-known Legionnaires' disease, and also the similar but less serious conditions of Pontiac fever and Lochgoilhead fever.

What are the changes to the ACOP?

The most significant change for you, as a provider of residential accommodation, is the removal of the 300 litre limit for hot and cold water services. This was an artificially chosen limit and its removal means that **all** premises with a water system are now **within the scope of the revised ACOP**. Also, recent research shows that legionella does occur in smaller domestic systems.

Practical guidance on how to comply with your new legal responsibilities regarding control of legionella is given in the ACOP. It is important you use the current version of the ACOP as it has been recently updated. Important changes that we made to the ACOP and guidance include:

- keeping records for a minimum of five years;
- water treatment companies and consultants must show their service is effective;
- recommended guidance linked to the appropriate sections of the ACOP;
- details on all aspects of risk assessment control;
- inclusion of tables which detail the monitoring requirements for cooling towers, and hot and cold water systems; and
- a new title.

What do I have to do to comply with the law?

Legionella bacteria can multiply in hot or cold water systems and storage tanks in residential properties, and then be spread, eg in spray from showers and taps. Although the generally high throughput and relatively low volume of water held in smaller water systems reduces the likelihood of the bacteria reaching dangerous concentrations, you must still carry out a risk assessment to identify and assess potential sources of exposure. You must then introduce a course of action to prevent or control any risk you have identified.

Assessing the risk

It should be possible for you to assess the risk yourself, but if you do not feel you have the right skills, you can obtain help and advice from a consultant. When you do the risk assessment, consider the following:

- Are conditions right for the bacteria to multiply, eg is the water temperature between 20°C and 45°C?
- Are there areas where stagnant water occurs (deadlegs), eg pipes to a washing machine that is no longer used?
- Are there infrequently used outlets, eg showers, taps?
- Is there debris in the system, such as rust, sludge or scale (often a problem in old metal cisterns), that could provide food for growing legionella?
- Are there thermostatic mixing valves that set a favourable outlet temperature for legionella growth?
- Are any of your employees, residents, visitors etc vulnerable to infection, eg older people, those already ill?

Answering 'yes' to any of these questions suggests there is an increased risk of your residents being exposed to legionella and falling ill.

What should you do if you decide the risks are insignificant? Review the assessment periodically.

What should you do if you identify risks? Introduce proper controls, which could include disinfection of the system - you will need to refer to the ACOP for guidance on the action you should take. As the design, maintenance and operation of the system are crucial in controlling the growth of legionella, any action you take is likely to include the following:

- ensuring water cannot stagnate anywhere in the system, eg remove redundant pipework, run taps/showers in unoccupied rooms;
- keeping water cisterns covered, insulated, clean and free of debris;
- insulating pipework;

- maintaining the correct temperature at the calorifier (ie the hot water cylinder);
- advising maintenance staff working on the system about the risks and how to minimise them; and
- advising tenants about the risks, the control measures you are taking and the precautions they can take, such as flushing through showers following a period of non-use.

Note: raising the temperature of your warm water is one way to control legionella growth, but could also increase the risk of burns and scalding. You will need to consider points like this when you do your risk assessment and decide which control measures to use.

What should you do after assessing the risk and putting controls in place? Review your risk assessment at regular intervals, especially if any factors change, eg you change your disinfection regime, more vulnerable groups of people (eg the elderly) move into your accommodation.

Where can I get further information?

Further details about the treatment and management of hot and cold water systems are available in the Approved Code of Practice and guidance:

Legionnaires' disease. The control of legionella bacteria in water systems. Approved Code of Practice and guidance L8 (Second edition)

HSE Books 2000 ISBN 0 7176 1772 6 .

- Part 1 of this publication contains advice on your duties under the law.
- Part 2 contains guidance on the technical aspects of the assessment and control of legionella risks.

You may also find the following publications helpful:

- *Legionnaires' disease: A guide for employers* Leaflet IAC27(rev2)
HSE Books 2001 (single copy free or priced packs of 15 ISBN 0 7176 1773 4);
- *Controlling legionella in nursing and residential care homes* Leaflet INDG253
HSE Books 1997 (single copy free);

- *An introduction to the control of legionella bacteria in water systems* Video
HSE Books 2003 ISBN 0 7176 2580 X;
- *The control of legionellosis: A recommended code of conduct for service providers*
Water Management Society/British Association for Chemical Specialties, 1999.

You can also obtain advice from:

- your local HSE office (contact details will be in your local directory), HSE Infoline (08701 545500), and the HSE website (www.hse.gov.uk);
- the environmental health department of your local authority (contact details will be in your local directory);
- professional bodies and organisations such as the Chartered Institution of Building Service Engineers (CIBSE) at www.cibse.org (Tel: 020 8675 5211), the Building Services Research and Information Association (BSRIA) at www.bsria.co.uk (Tel: 01344 426511), the Chartered Institute of Environmental Health (CIEH) at www.cieh.org (Tel: 020 7928 6006); and
- associations such as the Water Management Society (WMS) at www.wmsoc.org.uk (Tel: 01827 289558) or the British Association for Chemical Specialties (BACS) at www.bacsnet.org (Tel: 01524 849606).

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA
Tel: 01787 881165 Fax: 01787 313995

Website: www.hsebooks.co.uk

(HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: www.hse.gov.uk.)

For information about health and safety ring

HSE's Infoline Tel: 08701 545500 Fax: 02920 859260

e-mail: hseinformationsservices@natbrit.com

or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

This leaflet is available in priced packs of 10 from HSE Books, ISBN 0 7176 2207 X.
Single free copies are also available from HSE Books.

© *Crown copyright* This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. First published 05/03.
Please acknowledge the source as HSE.

INDG376 05/03 C1000

Printed and published by the Health and Safety Executive