

Legionella in Spa Pools – FAQs for Holiday Lets

1. Why do I need to consider the risk from Legionella?

Legionella bacteria cause Legionnaires' disease and other illnesses such as Pontiac fever. These are infections which can kill. Spa pools (hot tubs) create ideal conditions for *Legionella* bacteria. The agitation of the water creates droplets which are inhaled by users and others nearby. Some very large outbreaks of Legionnaires' disease have been caused by spa pools, even when they have not actually been in use.

HSE consider the risk from *Legionella* to be very serious and it is a priority both for HSE and for Argyll and Bute Council.

2. What is the purpose of this guidance?

This guidance has been produced for holiday lets who may have hot tubs available for use by the public.

It is not intended to replace HSE's guidance **HSG282: The control of legionella and other infectious agents in spa-pool systems** which is required reading for hot tub operators. You can download that guidance from www.hse.gov.uk/legionnaires/spa-pools.htm.

3. Does health and safety law apply to me?

Yes, almost certainly. The provision of holiday accommodation is considered to be an undertaking in health and safety law. If you provide holiday accommodation for more than 20 weeks in any year, the council will be your regulator. If you provide accommodation for fewer than 20 weeks, then HSE will be your regulator.

4. Do I need to carry out a risk assessment?

Yes, you do. There are two types of risk assessment that are required.

- A general one, covering physical hazards such as slips, trips and falls and electrical safety.

- A specific one under the Control of Substances Hazardous to Health Regulations 2002 (COSHH), for harmful substances and organisms such as *Legionella* and chemicals.

Advice on general health and safety risk assessments can be found at www.hse.gov.uk/simple-healthsafety/index.htm.

Advice on COSHH assessments can be found at www.hse.gov.uk/coshh.

5. How do I carry out a COSHH assessment?

You should:

- Gather information about the hazardous properties of the substances, the work, and the working practices (or find out what the problems are)
- Evaluate the risks to health
- Decide on the necessary measures to comply with Regulations 7-13 of COSHH
- Record the assessment (if you have 5 or more employees)
- Decide when the assessment needs to be reviewed

You can find more information on carrying out a COSHH risk assessment in the HSE publication [A step by step guide to COSHH assessment](http://www.hse.gov.uk/coshh) (available at www.hse.gov.uk/coshh).

Whether you have a written COSHH assessment or not, you should be certain that you have completed the assessment process and be sure that you can explain this clearly to an inspector.

Safety data sheets for the chemicals you use are essential information and should be given to you by your chemical supplier. Safety data sheets alone are not a substitute for a COSHH assessment. For instance, you may need to

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consider preventing *Legionella* exposure when cleaning filters.

6. *How do I assess the risks from Legionella?*

This guidance is intended to cover the use of spa pools (hot tubs) in single holiday lets. More detail on the risks from *Legionella* and how they can be controlled can be found in **HSG282**, which also explains how to control the risks. For more information, see www.hse.gov.uk/legionnaires/spa-pools.htm.

7. *What type of spa pool can I use?*

If the pool is being used by the occupants of a single holiday let only, then a domestic type pool can be used, *provided* it is fitted with a continuous dosing system for disinfection.

Inflatable spa pools are **not** acceptable for commercial use.

If the spa pool is shared between units, then it must be of a commercial type – these will typically be purpose-built overflow pools with a balance tank and fully-automated chemical control.

8. *What sort of water supply can I use?*

The water supply must be of drinking water quality. If you're on a private water supply, make sure that the water supply to the spa pool is taken off after the water has been treated.

9. *What pool-water treatment is needed?*

The water must be disinfected to kill dangerous bacteria such as *Legionella*. You will need to use a disinfectant that leaves a residual concentration in the water.

The following treatments are **not** sufficient without residual disinfection from bromine or chlorine: □ Ultraviolet light (UV)

- Hydrogen peroxide (H₂O₂)
- Ozone (O₃)

Treatment **must** use chlorine or bromine in some form. Solid chemicals are safer to use than liquids. An automatic dosing system which continuously treats the water is required – this can be as simple as an in-line chemical feeder using “Trichlor” or bromine tablets. In-line feeders can be retro-fitted.

To ensure that the water is safe, the following residual disinfection must be available maintained in the pool at all times, even when it is not in use:

- Free chlorine: between 3 and 5 milligrams per litre (mg/L)
- Combined chlorine can cause irritation and should be kept below 1 mg/L
- Bromine: between 4 and 6 mg/L

You will also need to ensure that the water's pH (degree of acidity) is in the right range for the disinfectant to work properly. The pH should be kept in the range 7.0 to 7.6 – you may need to add chemicals to achieve this. Check with your pool chemical supplier for advice.

10. *How often should the water be tested?*

The water must be tested twice a day to ensure that disinfection and pH levels are right and corrected accordingly. If minimum disinfection levels are not being met (see above) the pool must be taken out of use. To prevent irritation or bleaching of costumes, the disinfectant levels must be kept below 12 mg/L (both chlorine and bromine) and the pool should be closed if this level is exceeded.

11. *Is other monitoring required?*

On each occasion, checks should include:

- Colour and clarity
- Temperature
- Chlorine (free, total and combined) or bromine in the pool

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- pH

You must keep a record of the monitoring and test results for five years and show them to an inspector when asked.

You must also arrange to have monthly microbiological samples taken and quarterly samples for *Legionella*. The Council does not provide a hot tub sampling service and you should find an independent lab. More information is in [HSG282](#).

Should you receive unsatisfactory results please refer to manufacturer's Instructions and HSG282. We would also encourage you to discuss this with an Officer.

12. When should the water be changed?

The water must be changed weekly or after each group of guests, whichever is sooner, and the pool thoroughly cleaned and disinfected, including all associated pipework, before being refilled.

13. Who can use the spa?

Anyone who is fit and healthy, provided they are not suffering from gastrointestinal problems. Warm water in can cause problems for people who are pregnant, have cardiovascular problems or are subject to fits. People taking medication for cardiovascular and nervous system conditions, and those with physical disabilities, should take medical advice before using a spa pool.

Children can use the spa pool if they are confident swimmers, but strictly under continuous supervision. Children should not be allowed to immerse their heads in the water.

Children under 4 should not use a spa pool because they cannot regulate their body temperature effectively and children under 8 should be carefully observed for signs of heat stress.

14. What advice should be given to users?

Users must be given sufficient information to ensure that they are safe in the water and do not do anything that could affect the hygiene of the pool. You should have clear rules about, for instance:

- Showering before use
- Not using glass drinks containers
- Supervising children at all times
- Not using the spa pool if impaired by alcohol, drugs or medication
- Observing the maximum number of users
- Not using the pool for prolonged periods – 15 minutes maximum is recommended

You may identify other rules that are appropriate for your spa pool.

15. Should access to the spa pool be restricted?

Spa pools should be kept in secure areas which cannot be accessed by children not under supervision.

16. Where can a spa pool be located?

Spa pools should be located away from overhanging trees or where roofs can drain into them. This prevents organic contamination entering the pool.

Pools should be placed on a level, hard surface which can be cleaned and disinfected. Access should be by a paved or boarded route to keep feet and the pool clean.

17. What should be done to ensure electrical safety?

The electricity supply must be sufficient for all the pumps and other equipment. The supply must be protected by residual current devices or similar. Most pools will require a 15A circuit, so check the manufacturer's specifications. Electrical supplies must be designed and installed to outdoor standards

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and cables routed so as not to create a tripping hazard. If buried, armoured cable will be required. Electrical work must be carried out and tested by a competent person.

18. How should a spa pool be cleaned?

Cleaning agents used must not affect disinfection of the spa pool. The following frequencies are recommended:

Daily:

- Spa pool water line
- Overflow channels
- Strainers and grilles
- Immediate surroundings
- Check filters and backwash sand filters daily

Weekly:

- Drain and clean the whole system
- Balance tank
- Areas behind headrests
- Covers and lids

Monthly:

- Remove jets
- Inspect jets and accessible pipework for signs of biofilm
- Clean and disinfect as necessary

More information on cleaning routines can be found in **HSG282**.

19. How should chemicals be stored?

Chemicals must always be stored in a locked place. The storage area must be marked as a chemical store. Make sure that acid chemicals are kept well away from chlorine disinfectants and other alkalis. You should **never** rely on hirers managing the chemical treatment of a spa pool.

20. What training do operators need?

Operators need to be competent. Training should be available from spa pool suppliers

and installers. Make sure you keep records of training and keep people's skills up to date.

21. How can slips, trips and falls be prevented?

Safe means of getting into and out of the pool are essential. Steps must be secure, nonslip and have a good hand-hold.

22. What should be done if there's an accident?

If a member of the public is injured and has to be taken to hospital for treatment, then you must report the incident to www.hse.gov.uk/riddor/report.htm.

Accidents to employees must be recorded in your accident book. Some injuries and conditions are reportable including any injury that results in a person being unavailable for normal duties for more than seven days. For more information, see www.hse.gov.uk/riddor.

About this leaflet

This leaflet contains a summary of advice and recommendations which will help you to comply with the law. It is not a substitute for the official guidance. More information on the law and *Legionella* can be found at www.hse.gov.uk/legionnaires/spa-pools.htm.

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