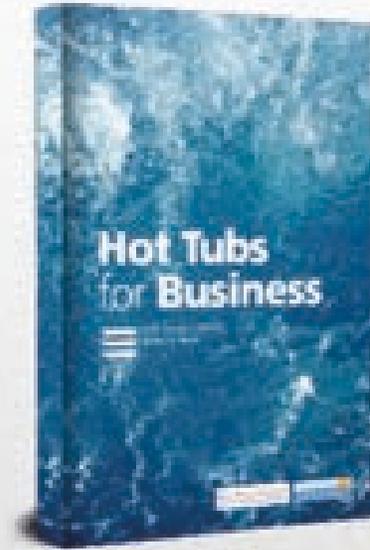




POOL WATER TREATMENT
ADVISORY GROUP

Hot tubs for Business – why you need the PWTAG publication



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This book includes more practical guidance than HSG282 on how to assess and control the risks of exposure to *Legionella* agents and other infectious for staff, users, and anyone else potentially exposed to the hot tub water or aerosols from it.

Who is this applicable to?

- Holiday park rentals;
- Hotel bedrooms;
- Holiday lets;
- Hot tubs for hire (lets);
- Hot tubs on display; and
- Hot tubs at exhibitions.



Getting the basics right

Hot tubs are a recognised source of diseases, including :

Legionnaires' disease; and skin infections caused by *Pseudomonas aeruginosa*

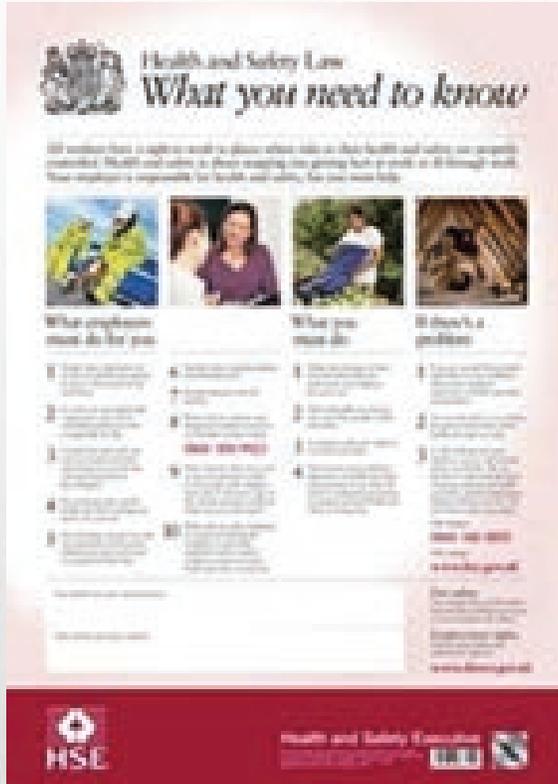


Essential that managers, operators and private individuals renting properties know their legal duties



Legal Duties

- The Health & Safety at Work (etc) Act 1974
- The Management of Health and Safety at Work Act 1999
- Control of Substances Hazardous to Health Regulations 2002
- HSE 2013 L8 Legionnaires' disease The control of Legionella bacteria in water systems Approved Code of Practice and guidance on regulations
- HSE 2014 HSG 274 part 2 Legionnaires' disease, The control of Legionella bacteria in hot and cold water systems.
- HSE 2017, HSG 282 The control of Legionella and other infectious agents in spa pool systems
- PWTAG Swimming Pool Water: Treatment and Quality Standards for Pools and Spas 2017



- Requires duty holders to ensure the health and safety of their employees or others who may be affected by their undertaking.
- This extends to risks from Legionella bacteria and other infectious agents arising from work activities.

H & S at Work etc Act 1974

The HSW Act does not apply to:

- the private owners of hot tubs; and
- hot tubs installed in a holiday park unit where there is no financial gain and they are for the exclusive use of the owner, family and occasional guests.

Nevertheless to ensure its safe use, this book should still be followed.

Do not assume all manufacturers' instructions are currently adequate to comply with this book and HSG282. They are not!

So all hot tubs used as a business activity (eg in a holiday park rental unit or hotel bedroom(s) with their own dedicated hot tub, or as part of a rental agreement for a single family or group use) are subject to the general duties under the HSW Act.

These systems must be managed and controlled in proportion to the risk and the risk assessment should consider the type of pool and its use.



Statutory Duties on those managing hot tubs

Also imposed by

- The Management of Health and Safety at Work Regulations 1999 (MHSWR); and
- The Control of Substances Hazardous to Health Regulations 2002 (COSHH).

The Management of Health and Safety at Work Regulations

require that duty holders:

- assess the risks in their workplace ;
 - have access to competent help and advice to apply health and safety legislation ;
 - establish procedures for employees where there is serious and imminent danger ;
 - coordinate health and safety where two or more employers share a workplace.
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provides a framework of duties designed to:

- assess,
- prevent or control the risks from hazardous substances, including chemicals and biological agents such as Legionella; and
- take suitable precautions

Control Of Substances Hazardous to Health Regs

The essential elements are:

- risk assessment
- preventing exposure or substituting a less hazardous substance or process/method, where reasonably practicable
- controlling exposure if prevention or substitution are not reasonably practicable
- maintaining, examining and testing the control measures
- providing information, instruction and training for employees
- providing health surveillance of employees where appropriate.



Applies to employers and those in control of premises where there is a risk of exposure to Legionella.

It also:

- sets out the responsibilities of those supplying services such as water treatment, as well as those of manufacturers, importers, suppliers and installers
- gives guidance on identifying, assessing and managing the risk in water systems, as well as record keeping

HSE 2013 L8 Legionnaires' disease The control of Legionella bacteria in water systems Approved Code of Practice and guidance on regulations



HSE 2014 HSG 274 part 2
Legionnaires' disease, The
control of *Legionella* bacteria
in hot and cold water systems
gives further practical advice on
the requirements of the HSW
Act, MHSWR and COSHH about
the risk from Legionella



- HSE 2017, HSG 282 The control of *Legionella* and other infectious agents in spa pool systems gives further advice to spa pools and forms the backbone of this book

Site owners' duties

HSW Act Section 3 imposes a duty on an employer (or self-employed person) to avoid exposing people who are not their employees (e.g. guests and visitors) to health and safety risks.

The site owner of the holiday park should:

- liaise with private owners to ensure the safe use and maintenance of hot tubs and direct them to relevant information and guidance, including the manufacturers' instructions, on safe use and risks posed to both themselves and to others from Legionella ;
- if selling or renting hot tubs on site, take reasonable steps to ensure that the risk of exposure from infectious agents, including Legionella, is understood, managed and controlled. This would be considered part of the site owner's business undertaking

The risk assessment

should :

- include the name of the risk assessor, the date of the assessment, date of review, action required and the date completed
- consider the type of pool and its use

e.g.



Hot tubs are for use by a small, discrete group of people at any one time and are typically:

- either a rigid or inflatable/foam-filled structure with freeboard and skimmer
- systems where the water should be changed after each rental, or weekly – whichever is the shorter
- disinfected by chlorine or bromine using an inline feeder.

The risk assessment

should :

- consider the design bather load and duration of use;
 - identify the information to be provided for users, including good standards of hygiene, recommended bathing time, bather load and the appropriate procedures when using the hot tub;
 - determine the frequency and extent of the microbiological sampling strategy;
 - determine the suitability of the water treatment and cleaning regimes;
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- consider the competency of staff and contractors;
 - consider the appropriateness of records;
 - consider the definition of roles and responsibilities;
 - consider all H & S issues including COSHH;
 - consider the appropriateness of the written scheme;
 - consider the means of reducing and controlling the risk;
 - identify circumstances for its review
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Risk assessment Appendix 1 - Audit checklists

Because of the risk of causing Legionnaires' disease and other infections unless managed appropriately a written scheme of control should be prepared, implemented and properly managed (the Normal Operation Plan).

Checklists included in Appendix 1 are designed to help the responsible person audit the arrangements that they have in place to control the risk of infection from the hot tubs they are responsible for. This will include a physical inspection of the hot tub and its components.

Checklist 1 The risk assessment

- Managing the risks: roles and responsibilities- clear definition in writing

Checklist 2 Hot Tubs

- Managing the risks: the written scheme (NOP)
- Design and construction – WRAS water fittings and materials, cleaning, corrosion
- Monitoring – Daily, Monthly Quarterly
- Operation and Maintenance – Operation Manual, frequency of use
- Water treatment programme –in place, biocide and pH chemicals
- Other procedures – non use periods, laying up causes of infection etc

Training, awareness and competence

The managers, operators and private individuals renting properties with hot tubs should identify all training needs.

All personnel involved with the water treatment system must have received appropriate training and the training must reviewed, updated and recorded, as and when necessary.

Personnel must be aware of:

- the importance of conforming with the management system policy and procedures, and with the requirements of the management system
- the significant operational or safety impacts, actual or potential, of their work activities and the benefits of improved personal performance
- their roles and responsibilities in conforming with the policy and procedures and with the requirements of the management system, including emergency preparedness and response requirements
- the potential consequences of departure from specified operating procedures.

Personnel performing tasks with significant operational or safety impacts should be competent on the basis of:

- education,
- appropriate training and/or experience.

Personnel performing water quality tests should be able to:

- distinguish different colours, as the analysis of the results of such tests involves this ability (unless photometers are provided).



Manufacturers' instructions should always be carefully followed and staff should receive sufficient information, instruction and training in order to undertake any testing in a competent manner.

Training and competence is applicable to all staff involved both direct and indirectly sourced



PWTAG's aim is to improve pool operation indirectly through guidance, organisation and syllabus production on pool operator training.

Dedicated training syllabi for hot tubs and spa have now been developed

Accredited training courses will shortly be available from PWTAG accredited training organisations as well as others



Records

Should include as a minimum:

- Details of responsible people and contacts;
- Record Logs –pool test results, plant checks; chemical additions, backwashing etc.;
- Analytical Certificates;
- Training Certificates;
- Safety Data Sheets for chemicals in use;
- Pool Safety Operating Procedures – NOP & EAP including method statements, safe systems of work etc.;
- COSHH Assessments;
- The Legionella risk assessment for the hot tub;

Record Logs



The operational monitoring and maintenance tasks should be fully recorded on log sheets and should provide a circular audit trail for out of spec parameters etc.

The log sheets should identify the person responsible for undertaking each task ideally showing name and signature.

There should be a facility to confirm that the records have been checked by someone in a supervisory role again ideally showing a name position and signature.

COSHH requires all records to be kept for a period of five years

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