



Advice for Legionella Control in Spa pools and Hot Tubs

Spa pool systems such as hot spas, hot tubs and portable spas can be a source of diseases caused by infectious agents, such as Legionella, E.coli, Cryptosporidium, Pseudomonas etc. These can be introduced via bathers, from dirt entering the pool or from the water source itself.

The warm water temperatures (between 20°C and 45°C) and deposit such as organic matter, provide ideal conditions for bacterial growth in poorly designed and maintained spa pools.

The environmental conditions of a spa pool are favourable for Legionella bacteria to grow which can cause a severe form of pneumonia (a bacterial respiratory infection) called Legionnaire's disease.

The powerful agitation of water in hot tubs/spa pools leads to the formation of aerosols which can be inhaled, this means that even people not in the immediate surrounding area of the hot tub/spa pool can breathe in the aerosols. This is especially important with Legionella.

Using a poorly maintained hot tub/spa pool can result in other illnesses caused by bacteria, viruses or protozoa such as hot tub rash caused by Pseudomonas aeruginosa, which manifests in a red, itchy rash with pus filled blisters, developing a few days after hot tub use or gastrointestinal illness (diarrhoea and vomiting) caused by organisms such as E.coli or Cryptosporidium with symptoms starting up to 10 days later.

The microscopic parasite Cryptosporidium can survive in water treated with chlorine or bromine and therefore, adequate filtration is required to remove this parasite from the water.

Organisms causing gastrointestinal illness are commonly found in water, food, soil and are excreted by infected persons and animals, even after symptoms have ceased.

Appropriate maintenance, water treatment and regular physical cleaning and disinfection will effectively control not only Legionella and other microbial activity, but also pH levels.

For further information see HSG282 – The Control of Legionella and other infectious agents in spa pool systems (www.hse.gov.uk/pubns/books/hsg282.htm)

DO:

- Always follow the manufacturers' instructions on cleaning and maintenance requirements
- Flush out the wastewater several times in your garden hose before filling your hot tub/spa pool
- Take a shower before using your hot tub/spa pool to remove body lotions and oils from the skin
- Disinfect and clean your hot tub/spa pool regularly – at least once a week while in regular use
- Use chlorine or bromine-based sanitisers (always follow the manufacturers' instruction on the cleaning product)
- Check pH balance of the water at least once a week to make sure pH levels fall between 7.0 and 7.6
- Extract and wash the cartridge filter to get rid of any dirt in between each use, at least once every 3 days.
- Replace old filters with new ones depending on the intensity of use
- Completely drain and deep clean your hot tub/spa pool every 3-4 months depending on usage
- Inspect the cover for mould, water absorption and damage in the lining and clean the cover regularly inside and out

DON'T:

- Don't wear skin lotions, spray tans and suntan lotions in your hot tub/spa pool
- Don't exceed the maximum number of bathers (one per seat)
- Don't ignore the manufacturers' maintenance instruction or cleaning product directions
- Don't leave your hot tub/spa pool without a cover when not in use
- Don't use your hot tub/spa pool if you have had diarrhoea within the last 14 days





Legionella in Spa Pools and Hot Tubs Checklist

Do you / your team have the appropriate training for testing water and managing the water quality of your systems and is the training still valid and recorded?

Do you have all the safety data sheets for the chemicals in use from your chemical provider?

Do your risk assessments cover the safe use of chemicals?

Do you have the appropriate PPE in place for the chemicals being used, is it in good condition, stored correctly and easily available?

Do you have a system for dealing with any chemical spillage and are your team trained on this ?

Is your water testing equipment suitable and sufficient, are you team trained on its use?

Do you have the correct tablets for your equipment, are they in date and covered by your COSHH assessments?

Do you have safe systems of work in place in the form of NOP/EAP and are your team aware of this and trained on same?

Does your safe system of work set out the water quality parameters for your team and are they aware of what to do in the event of being outside of the parameters?

Are you aware of the guidance documents form the HSE, do you have a copy, are your safe systems of work based on this?

Are you aware of the guidance documents from PWTAG, do you have a copy, are your safe systems of work based on this?

Is the unit deep cleaned between hires and water changed and is the cleaning chemical suitable and appropriate?

Are the units microbiologically tested every month?

Has the person that assumes overall responsibility for health and safety had suitable training, do they understand their role?

Do you provide any training / instruction for the operator when you sell a hot tub unit are you aware of the training requirements for operators?

Do you sell provide any water testing kits with the hot tubs, do you recommend any particular type of testing method, do you provide any training on this?

Do you provide any leaflets on the dangers / risks around hot tubs making customers aware of what can go wrong?

Have the hot tubs been risk assessed for suction entanglement and what was the outcome?

Do you have any cleaning / best practice recommendations for customers, do you offer any cleaning chemicals as part of the sale?