



Safety in Swimming Pools and Spa's

Swimming pools and spa's can be hazardous places if they are not well managed. The following details highlight some of the hazards and risks that might exist at your swimming pool or spa pool. They are by no means exhaustive and will vary depending on your own particular business. As a starting point use the blank sheet provided in this pack and carry out your own simple risk assessment.

Main Types of Hazards

Bacteria

Pathogenic bacteria and Protozoa if allowed to grow and multiply in swimming pools and spa pools can lead to disease.

These include:

- Cryptosporidia
 - Giardia
 - Legionella
- Pseudomonas, and
 - E coli

Managing the Risk

- Apply an adequate chemical treatment system, ensure chemical parameters are maintained within recommended limits and dosage adjusted according to the number of people using the pool.
- Test the pool prior to and after use and monitor chemical parameters regularly (at 2 hourly intervals where dosing is controlled manually).
- Ensure the pH is controlled between 7.2 and 7.8 to maintain the effective disinfection.
- Carry out bacteriological sampling at least monthly (more often if problems are identified).
- Consider closing the pool if chemical or bacteriological parameters exceed recommendations and the water could be a health risk to bathers. Seek advice from your EH Department. Resample until normal parameters are achieved.
- Implement a procedure to deal with faecal contamination of the water, e.g. clearing the affected pool area, remove as much material as possible, consider back-washing the filters if necessary and monitor parameters closely.
- Ensure all equipment is regularly serviced and maintained.
- Ensure filters, are adequately cleaned and maintained.
- Check equipment regularly for problems that could affect water treatment e.g. air locks in the automatic dosing system.
- Make sure that an adequate number of staff are trained in the operation of plant and equipment and water treatment.
- Put in place an emergency callout procedure with a competent water treatment/ pool engineering company, or alternatively adequately train staff to deal with emergencies in-house.
- Ensure there is a competent person on site at all times who can deal with any potential problems regarding water quality, plant and equipment or other emergencies that may arise.
- Implement a procedure to regularly check, clean and disinfect the balance tanks for the spa and swimming pool, the connecting channels and the spa itself.

Legionnaires Disease

The bacteria that cause legionnaires disease live in damp warm conditions and cause illness when sprays from contaminated water are inhaled.

- Showers and spa pools produce a spray and therefore a programme of regular disinfection of these systems should be put in place.
- Water systems should be designed to avoid long stretches of pipe where water could lie for periods of time.
- Ensure staff receive adequate training in water treatment and the importance of preventing contamination and the growth of pathogenic organisms or protozoa. They should also be aware of the of symptoms associated with exposure to such contamination and of what to do if they are suffering from these symptoms.



Chemicals

Handling chemicals can cause burns and skin irritation and certain chemicals when mixed can lead to dangerous gases being produced, which could cause asphyxiation.

- Provide a written procedure for delivery, storage and handling of chemicals, including instructions for dealing with spillages.
- Store different chemicals so that they are separated by a distance of at least one metre.
- Install bund walls around chemical storage areas.
- Clearly label chemicals and any connecting pipe work.
- Do not decant chemicals to other unlabelled containers.
- Train staff in the handling, storage and use of chemicals and maintain accurate safety records.
- Review the chemicals used regularly and replace them with a less hazardous alternative when possible.
- Provide staff with their own personal protective equipment.
- Keep records of Safety Data sheets provided by the manufacturer.
- Ensure the plant room and chemical storage area is well ventilated.
- Check dosing systems to ensure they are working correctly and check the position and operation of any 'no flow low flow' pressure switch.

Manual Handling

Lifting and moving stock may cause back injury or muscular strain

- Carry out a risk assessment on all manual handling operations.
- Where possible design premises which are spacious and limit the need for manual handling.
- Avoid lifting items which are too heavy – use trolleys, lifts or other devices where possible.
- Train staff in proper lifting techniques.

Pool Water

There is a risk of clients and staff being injured at the pool side, for example through slipping and falling. Bathers can also be injured in the water and there is a risk of both clients and staff drowning.

- Design the pool to maximise security and the visibility of the pool area
- Set an admission policy, e.g. no unaccompanied children, no admission with alcohol.
- Provide appropriate signage regarding the depth.
- Display rules, (no misbehaviour, no diving etc.)
- Train staff in life saving and first aid, keep records, implement a reporting system.
- Monitor recorded accidents and near misses and update risk assessment and policies accordingly.
- Provide first aid equipment.
- Ensure staff rotas include responsibilities to supervise the pool.
- Set a maximum bather load and do not exceed it.
- Supervise pools at all times when in use.
- Ensure all pool areas undergo regular maintenance and implement good housekeeping arrangements.

Sauna, Steam Rooms, Spa

Use of this equipment can lead to heat exhaustion, dehydration, burns, and cross infection

- Display advisory signs close to facilities, covering any specific warnings e.g. to pregnant ladies, use words and pictures where possible.
- Ensure that doors to all these areas can be opened internally and externally.
- Engage a competent person to regularly maintain the equipment.
- Ensure regular cleaning and disinfection is carried out.

Electricity

Accidents and electrical fires are mainly due to misuse of or badly maintained equipment.

- Ensure that all electrical systems and equipment are installed to meet current guidelines and that they are regularly inspected and maintained.
- Provide staff with clear procedures on what to do if there is damaged equipment or electrical failure especially near wet areas.

■ For Further Information:

Managing Health and Safety in Swimming Pools
HSG 179, HSE Books, Telephone: 01787 881165