Swimming Pool Safety Guidelines

Rialtas na hÉireann
Government of Ireland

SÁBHÁILTEACHT UISCE NA hÉIREANN
WATER SAFETY IRELAND

Ireland Active
Leisure, Health and Fitness Association

SWIM IRELAND

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Special thanks to all the people and organisations who contributed to both the content and the preparation of this document.

Swimming Pool Safety Guidelines are available from:

Water Safety Ireland:
The Long Walk, Galway, Ireland
Ph: +353 091 564400
Email: info@watersafety.ie
Web: www.watersafety.ie

Ireland Active
Irish Sport HQ, National Sports Campus,
Blanchardstown, Dublin 15, Ireland

Ph: +353 1-6251192
Email: info@irelandactive.ie

Swim Ireland
Irish Sport HQ, National Sports Campus,
Blanchardstown, Dublin 15, Ireland
Ph: +353 1 625 1120
Email: admin@swimireland.ie

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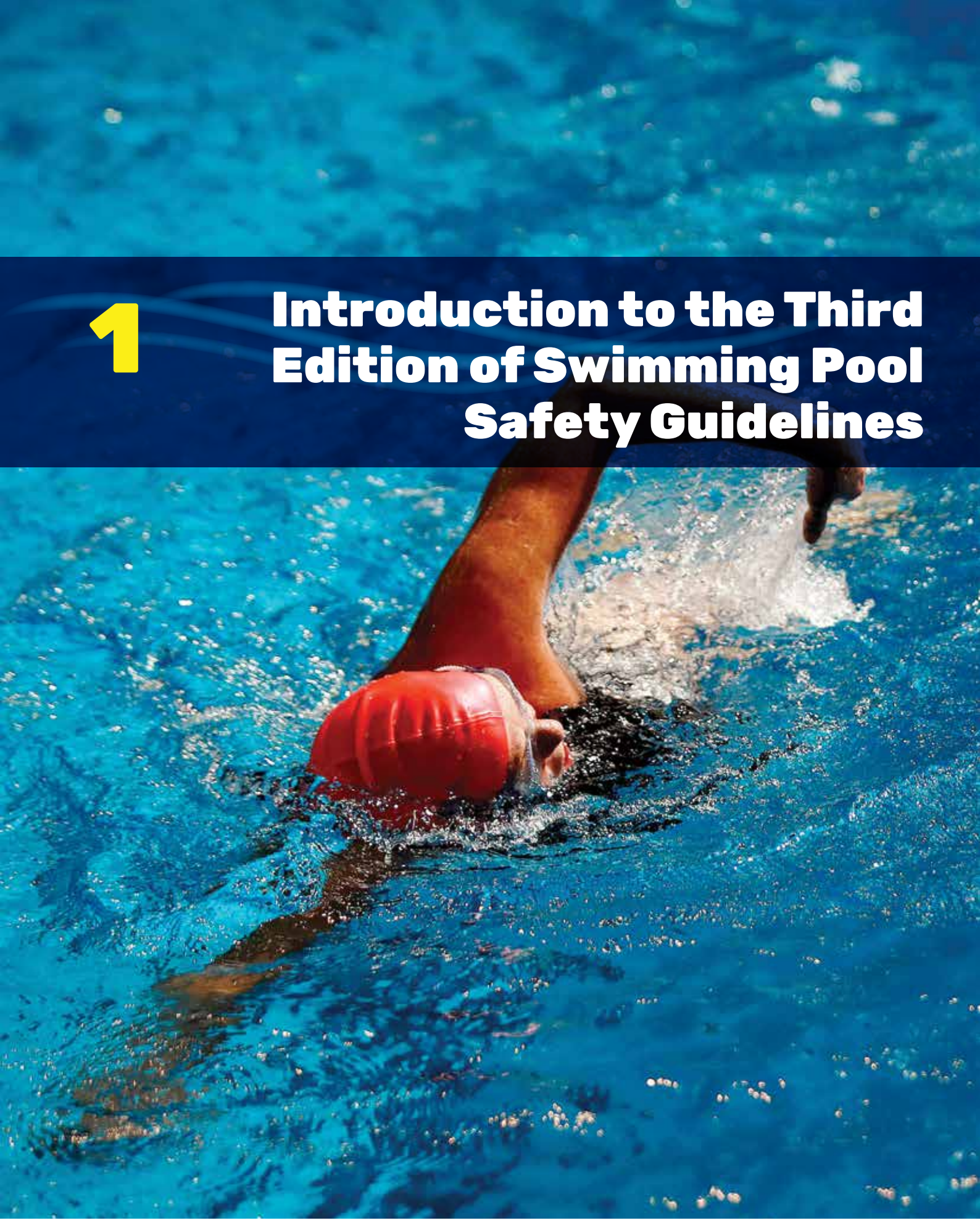
1 Introduction to the Third Edition of Swimming Pool Safety Guidelines



Welcome to the third edition of "Swimming Pool Safety Guidelines" proudly brought to you by Water Safety Ireland (WSI), Ireland Active and Swim Ireland who have worked together to revise and redevelop these guidelines in order to incorporate all the latest thinking in pool safety.

The three organisations presenting these guidelines are equally driven to provide a safe and enjoyable experience to all users of swimming pools. They continually strive to ensure that best practice become the single standard across all pools in the country and have incorporated all the latest thinking in these standards.

Water Safety Ireland is a statutory body with responsibility for provision of national standards and training for lifeguards, plus the promotion and provision of instruction in lifesaving, water safety, rescue, swimming, and resuscitation.*

Ireland Active is the national association for leisure, health and fitness sector who represent publicly and privately-owned leisure centres, gyms, swimming pools, fitness education providers and recreation facilities nationwide.

Swim Ireland is the National Governing Body for Swimming, Diving and Water Polo in Ireland and are a leading provider of swim education whose qualifications are recognized by Sport Ireland Coaching and Sport Northern Ireland.

Since the implementation of the previous guidelines in 2010, the industry has grown, developed and advanced in its thinking so it is important that these guidelines are monitored and reviewed on a continuous basis to keep pace with the industry. These guidelines detail the minimum requirements that a pool facility should possess in order to ensure that appropriate measures are in place to ensure a happy and safe experience for all in the water.

The 2021 Guidelines have drawn upon the knowledge and expertise of many and will contribute greatly to safety in all Irish swimming pools.

** S.I. No. 56/2019 - Water Safety Ireland (Establishment) Order 2019*

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Abbreviations

AED: Automated External Defibrillator

BLS: Basic Life Support

CIMSPA: Chartered Institute for the Management of Sport & Physical Activity (Formerly ISRM)

CPD: Continuing Professional Development

CFR: Cardiac First Responder

CPR: Cardiopulmonary Resuscitation

DLP: Designated Liaison Person (Child Protection)

EAP: Emergency Action Plan

EMS: Emergency Medical Services

ESRI: Economic & Social Research Institute

FINA: Federation Internationale de Natation

HSA: Health and Safety Authority (Ireland)

HSE: Health and Safety Executive (UK)

ILS: International Life Saving

ILSE: International Life Saving (Europe)

IA: Ireland Active (formerly ILAM)

ISO: International Standards Organisation

WSI: Water Safety Ireland

NOP: Normal Operations Plan/Procedures

CEN: Commité Européen de Normalisation (European Committee for Standardisation)

PA: Public Address

PSOP: Pool Safety Operating Procedures (NOP & EAP)

SI: Swim Ireland

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1.1 The Purpose of these Guidelines

Swimming and water safety are life-saving skills, which afford thousands of people the means to enjoy Ireland's aquatic environment in a healthy, enjoyable and safe manner.

Although swimming pools (which should at all times be lifeguarded) offer a greater level of safety, the risk of accidents happening remains ever present. This risk is even more prevalent with the growth in the number of leisure centres and swimming pools opening in Ireland and the number of adults and children visiting these venues.

The leisure sector in Ireland has experienced rapid growth, with more than 700 swimming pools public, private and commercial operating in the Republic of Ireland, ranging from the small hotel leisure or spa pool to the large water parks catering to thousands of visitors weekly.

There is a recognition that physical activity has a significant positive impact on the health of the nation. Participating in swimming continues to be one of the population's favourite pastimes, as referenced within research carried out by the Irish Sports Council and the ERSI (2007, 2009, 2013).

Any swimming pool in Ireland, that is open to the public, to residents or members, must be managed in accordance with the Safety, Health and Welfare at Work Act, 2005, and the accompanying regulations. There is a duty of care under this Act to ensure that the quality of swimming & spa pools is managed at safe levels and that bathers can expect competent staff and a safe hygienic bathing environment. The "Pool Safety Guidelines" emphasise the dual approach of awareness and prevention. These guidelines provide pool managers/ operators with comprehensive criteria and the information that they require to ensure their pools are as safe as possible.

1.2 Philosophy

Although swimming pools provide us with a safer place to swim than open water, unfortunately deaths and injuries still occur. It is the responsibility of pool operators to ensure that the chances of such incidents are minimised. Hazards/risks, which have been associated with past deaths or serious injury, include the following:

- Inadequate supervision (This includes the lifeguard being absent, failure to identify a person in difficulty or inadequate response in an emergency)
- Health related issues at time of accident e.g. heart conditions, poor vision.
- Alcohol or food consumed before swimming.
- Youth and inexperience.
- Weak and non-swimmers straying out of their depth.
- Unauthorised access to swimming pools.
- Unsupervised diving activities.
- Diving into insufficient water depths.
- Dangerous behaviour.
- Misuse of equipment.
- Cloudy pool water, which effects visibility of the pool bottom.
- The level of qualification of staff.

To ensure our swimming facilities are as safe as possible, the philosophy behind these guidelines is that we encourage operators to adopt the following approach to pool usage.

This will include the following elements:

- Awareness of the hazards and risks.
- Prevention of accidents within the swimming pool. This is the primary supervisory function of staff tasked with that responsibility such as the lifeguard. It can be improved through the education of pool users regarding safe practices and behaviour.
- Notices, signs, and oral reminders will all aid the philosophy of preventative lifeguarding.

These guidelines will highlight, for pool operators and those working in and around swimming pools, the dangers associated with modern swimming facilities and precautions that should be taken to decrease possible risks. These guidelines refer to operational issues in relation to modern swimming pool facilities, their immediate environs and associated facilities. While the planning and construction of these facilities is not directly referred to, it is anticipated that planners will refer to these guidelines to ensure best practice and that on-going safety issues receive priority attention.

Central to these guidelines is the concept of risk assessment. The necessity for regular risk assessment is highlighted throughout this document. It is central to the ongoing effective management of health and safety from a staff and user point of view. All activities in and around the pool environment should be risk assessed. The Safety Health and Welfare at Work Act (2005) requires that all activities in the workplace should be the subject of a written risk assessment, and safe systems of work be developed, and this should be recorded.

An awareness of possible hazards and the associated risks will ensure that staff are better able to act in a proactive manner. This awareness also ensures that steps are taken to remove or decrease risks.

Any pool will be safer if bathers are aware of potential hazards and act responsibly. These guidelines will outline measures that will help this process.

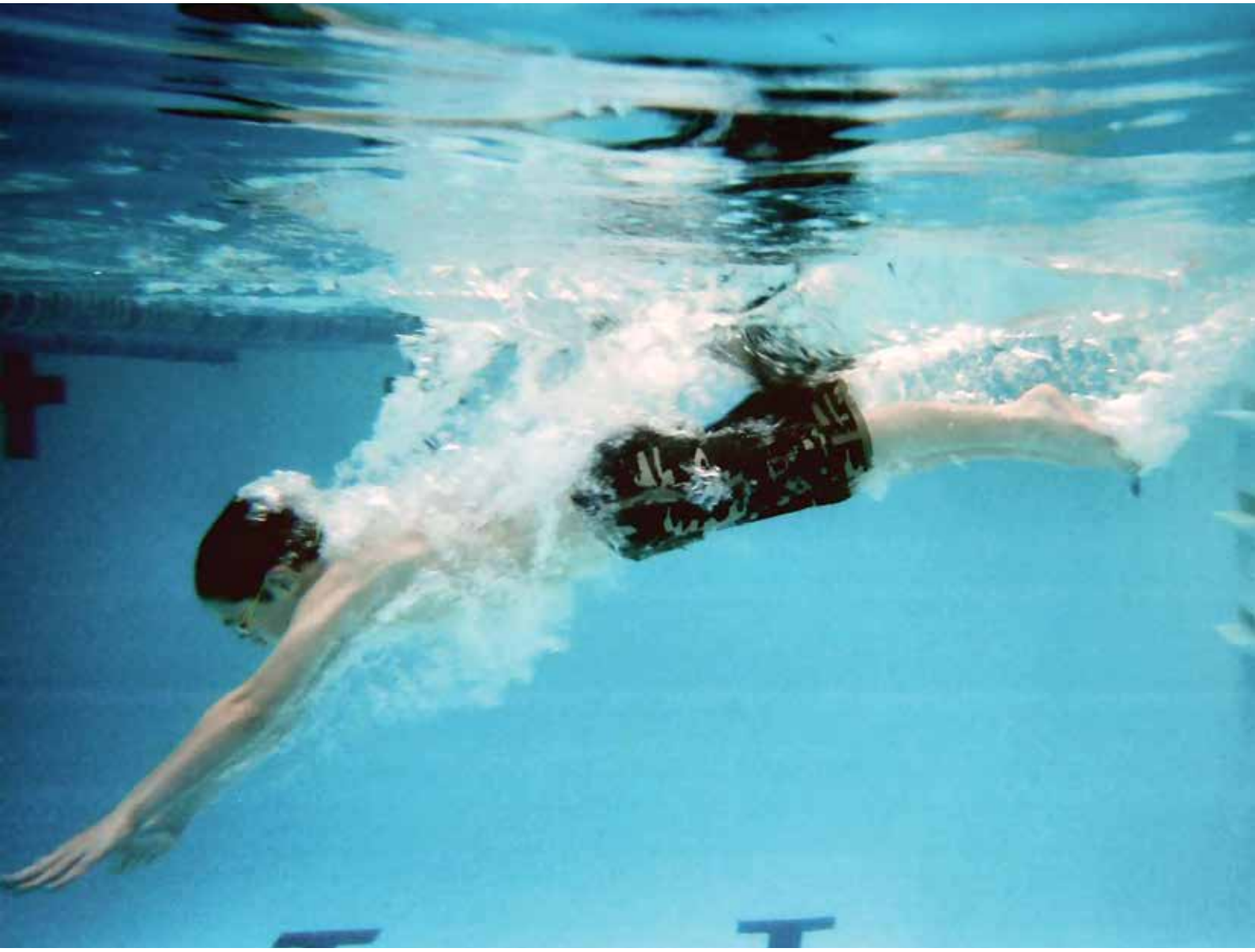
1.3 How to use these Guidelines

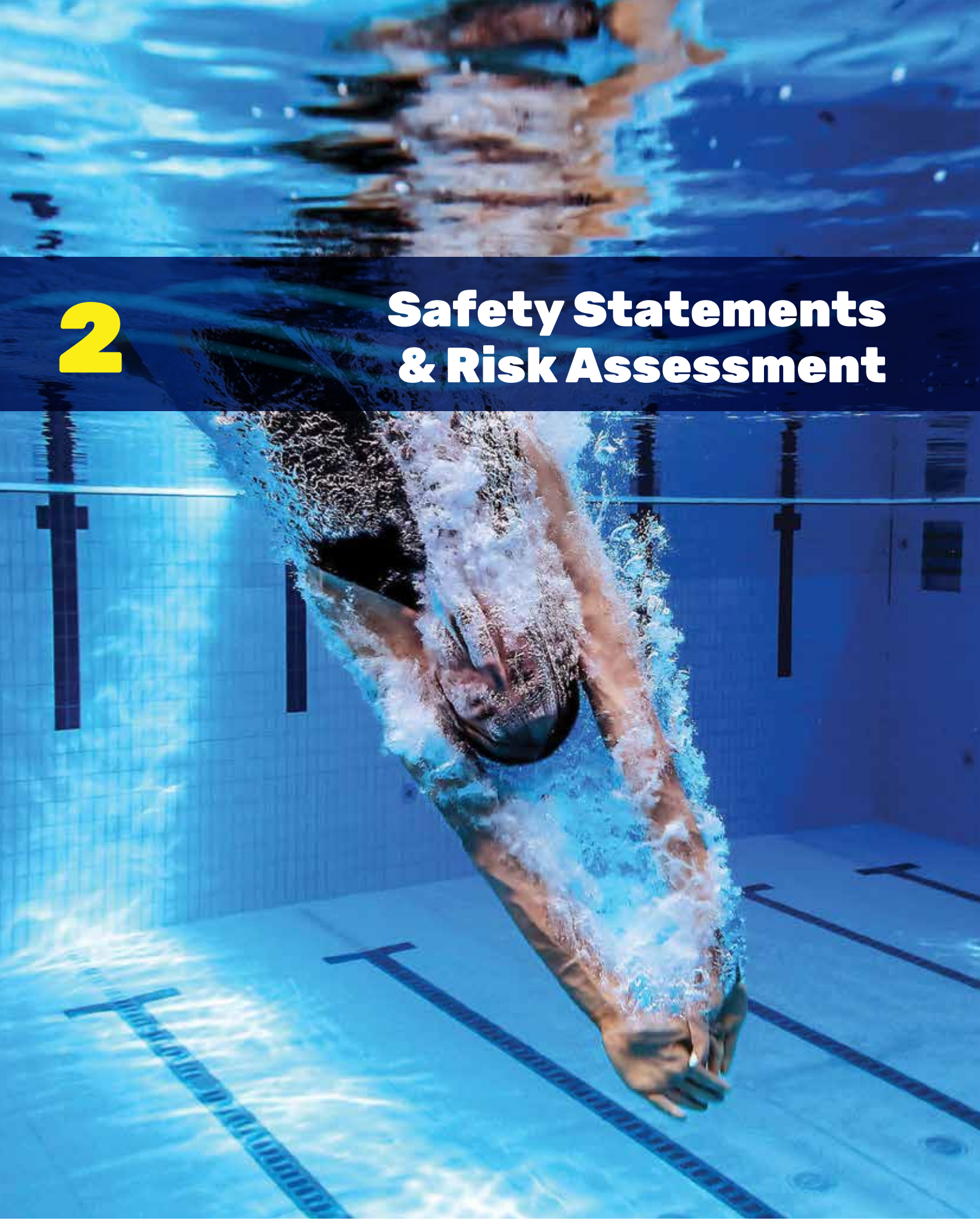
All pool operators are encouraged to read and adopt the principles as laid out in this document. It is recommended that the criteria laid out in this document be implemented in every pool in Ireland. Self-regulation is vital within this industry, and the utilisation of these guidelines by those who have the responsibility to work together to ensure that the required safety standards are in place and maintained, will go a long way to ensure the safety of all pool users.

These guidelines provide pool operators with practical help for implementation.

There is trained help and support available within the organisations that have brought you these guidelines. Please contact WSI , IA or SI for further assistance if required.

WSI has pool risk assessors available to visit your facility to conduct a risk assessment.





2 Safety Statements & Risk Assessment

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Lifeguard at work

2.1 Introduction

The aim of this section is to explain the concepts of a safety statement and risk assessment and how they apply to the operation of a swimming pool. Safety statements and risk assessment are core principles of health and safety legislation.

This legislation applies to all places of work, not just swimming pools. The principles of this legislation are required to be adapted in all work environments. The Health and Safety Authority is the agency tasked with overseeing the implementation of health and safety legislation.

2.2 What is a safety statement?

The Safety Health & Welfare at Work Act, 2005 requires that organisations prepare a written safety statement. A safety statement is a leisure centre's written commitment to the management of safety and health and an outline of how this is going to be achieved. A safety statement should include the following:

- Your health and safety policy.
- The results of your risk assessments.
- The names and job titles of those appointed to be responsible for any safety and health matters
- The duties of employers and employees, including the co-operation required from employees on safety and health matters.
- Your commitment to employee consultation and participation, including arrangements for appointing safety representatives.
- Your welfare arrangements.

- Your plans and procedures for dealing with emergencies.
- Your arrangements to ensure the safety of young persons, pregnant employees and visitors to the workplace or anyone else who may be affected by your work activities.
- Your personal protective equipment policy and register of equipment.
- Your first aid and safety procedures, and details about the equipment and facilities available.
- Your procedures for accident reporting and investigation.
- Your training records.

The centre's safety statement (including all risk assessments) should be brought to the attention of all employees and others at the workplace that may be exposed to any risks.

The concept of risk assessment underlies all safety issues within these guidelines.

The completion of regular Risk Assessments is a legal requirement under the Safety, Health and Welfare at Work Act, 2005. (HSA 2006)

In the context of swimming pools, the rules and regulations that apply to their operation are grouped together under the heading of Pool Safety Operating Procedures (PSOP). The PSOP is composed of two documents:

Normal Operating Plan (NOP)

Emergency Action Plan (EAP)

The PSOP forms part of the safety statement and should conform with the requirements of the Safety Health & Welfare at Work Act, 2005, as well as other relevant legislation and regulations. This manual will focus on PSOPs and the risk assessments that constitute them. It is also worth considering that in many places of work, the health and safety considerations primarily focus on the needs of employees. However, in a swimming pool, as in other areas of service activity equal consideration must be given to the public, who are the main users of the facility, as well as the employees.

2.3 Difference between a hazard and a risk

A hazard, in general, refers to anything with the potential to cause harm in terms of human injury or ill health, damage to property, damage to the environment or a combination of these, e.g. chemical substances, weak swimmers in deep water. A risk means the likelihood, great or small that an undesired event will occur due to the realisation of a hazard. Risk is dependent on the likelihood that a hazard may occur, together with the severity of the harm suffered/consequences. Risk is also dependent on the number of people who might be exposed to the hazard.

A risk assessment will ensure the operator considers all hazards and risks associated with the pool and its associated environments. Hazards and risks are terms that are commonly used in risk assessment. A hazard is something that at its most basic can cause harm.

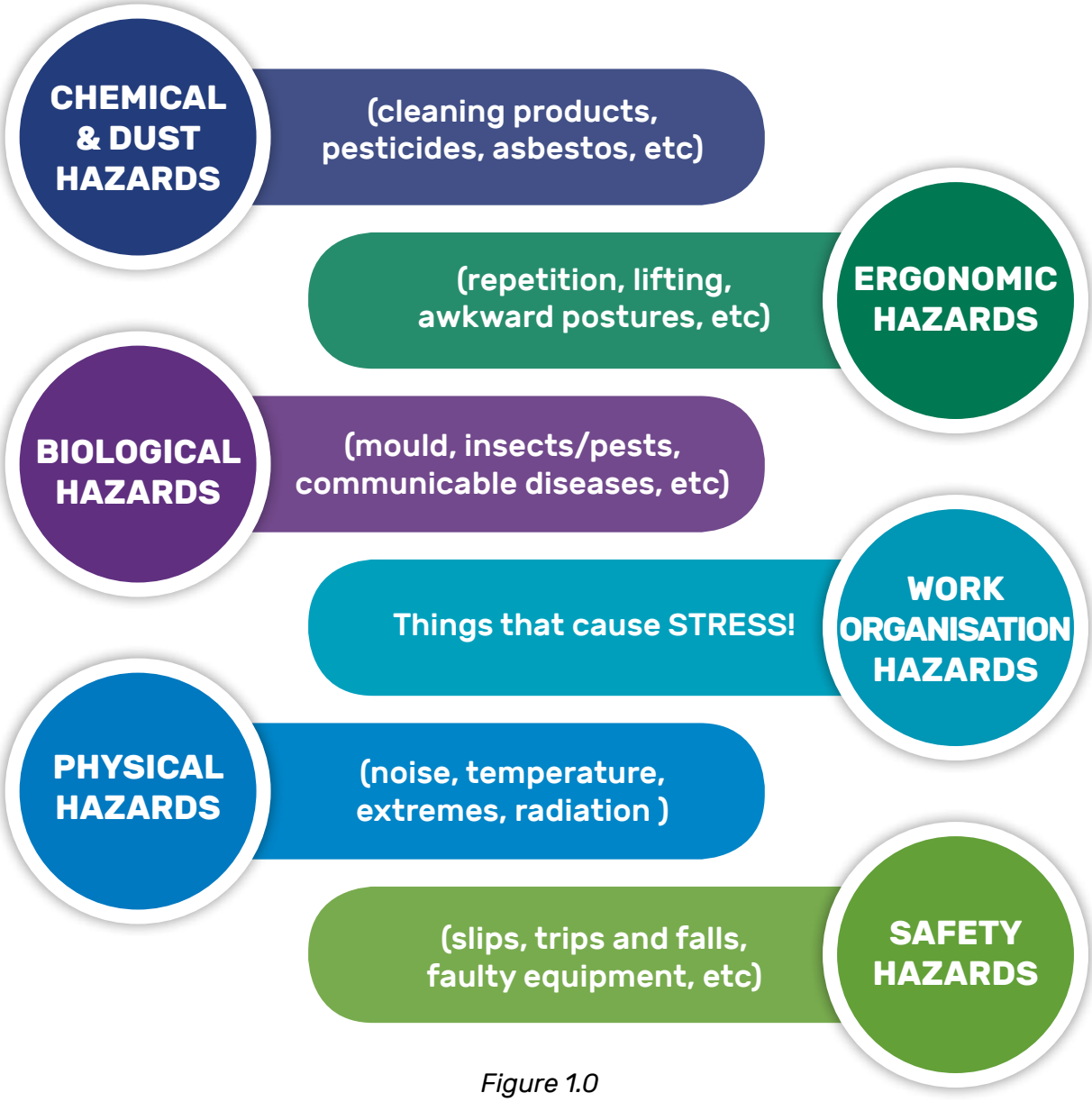


Figure 1.0

www.osha.gov Occupational Safety and Health Administration (Amended)

However, it can be broken down into a series of subgroups as outlined above in Figure 1.0

2.4 Chemical Hazards

The issue of chemical hazards in a swimming pool principally relate to the use and storage of the chemicals required for the treatment of the swimming pool water. These should be handled as per the materials safety data sheet. However, the correct dosing of swimming pool water also poses a risk to the health of both the pool user and the pool staff. It is vital that trained competent personnel carry out the handling and management of chemicals in the swimming pool and plant room.

2.5 Ergonomic Hazards

The layout and design of storage areas in the swimming pool has the potential to pose a hazard, as does the design of pool covers. Manual handling regulations require that all manual handling be eliminated if possible. Where it cannot be eliminated then it should be automated. It is only where these options are not available that training to lift should be considered. These guidelines should be considered when risk assessments of any manual handling are being conducted, and further that manual handing is not simply the lifting of an object it is also the pushing or pulling of objects.

2.6 Work Organisational Hazards

A work organisation hazard describes the way work is organised for the employee by the operator. In the context of swimming pool operation, one should consider the organisation of the role of the lifeguard. The nature of the job requires high levels of concentration. It is well established that one can only manage these levels of concentration for a short period. It is recommended that individual lifeguards should not be left in situ for extended periods. If the lifeguard is left in the poolside for extended periods the individual's effectiveness may be affected which could compromise the safety of pool users. Issues such as the length of time that lifeguards spend on the poolside should form part of a risk assessment and be included in the NOP.

2.7 Physical Hazards

Swimming pools can be very noisy and hot places to work. Regulations exist under the Safety Health & Welfare at Work Act, (2005) that govern how much noise an employee can be exposed to. The noise levels in workplaces need to be checked regularly to ensure that employees are not being put at risk. The design of the swimming pool may put users at risk. These include such features as columns that visually look very pleasing but form an obstruction when supervising the pool. These must be considered when conducting risk assessments. The safety and wellbeing of both user and staff must be considered. The design of a swimming pool may produce hazards. Designers of swimming pools may include features that cause blind spots for lifeguards, and this in turn increases the risk of accidents and injuries.

2.8 Safety Hazards

Slips and trips are common hazards in the workplace. They are caused by such as a wet poolside or equipment such as floats not being put back properly after use. These hazards affect the safety of user and employee alike.

The behaviour of the user may also have an impact as a safety hazard in the swimming pool. The hazard posed by non and weak swimmers entering deep water. Diving as an activity poses a hazard to the diver and other pool users.

2.9 Biological Hazards

Biological pollutants are substances in our environment which come from living organisms and can affect our health. They include things such as pollen from trees and plants, insects or insect parts, fungi, bacteria and viruses, and even animal hair, animal skin scales, saliva, and urine. They may be hazardous to swimming pool users as it may cause a number of infectious diseases, some of which can be fatal.

Biological pollution consists of Virus, Bacteria, Algae, Moulds etc and can be introduced into a swimming pool in a number of ways for example:

- On bathers' bodies (skin).
- Faecal matter.
- Blood.
- Mucus.
- Via the source water\On the bottom of outdoor footwear.
- Unclean equipment brought in for aquatic activities.

The most common way of disinfecting swimming pool water is by the addition of a chlorine-based disinfectant to the pool water circulation system and chlorine kills most (but not all) types of biological pollution. However, vigilance is required to ensure all areas of swimming pools are subject to rigorous and frequent cleaning and disinfecting. A regular risk review for biological hazards will also ensure that any advice or instruction received from outside agencies, such as the Health Service Executive or environmental health offices regarding specific issues, such as local or national diseases outbreaks are considered.

A risk assessment in progress

2.10 What is Risk Assessment?

A risk assessment is simply a careful examination of what, in your workplace, could cause harm to people, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm. Staff and visitors to the swimming pool have a right to be protected from harm caused by a failure to take reasonable control measures. Accidents and ill health can ruin lives and effect your business. In addition, if output is lost, insurance may increase or one may have to go to court. One is legally required to assess the risks in the workplace so that a plan can be implemented to control the risks.

A risk assessment is simply a careful examination of what in your workplace could cause harm to people so that you can identify the precautions required to prevent any harm occurring. A risk assessment formally documents your identification of these potential risks and sets out the steps you have taken to mitigate the potential risks.

A risk assessment is a living document, which should be reviewed regularly, at least annually and certainly after any incident that may identify new hazards or identify an increase in the level of an existing risk.

2.11 The Public and Risk Assessment

In many businesses the safety of the public is not a primary concern. Many companies do not deal directly with the public. Instead, health and safety are focussed on the employees. However, in swimming pools, like retail outlets the safety of the public must be considered at the same time as that of the staff. In swimming pools many of the hazards that impact on staff safety and welfare also impact on the users of the facility.

2.12 Who Should Conduct a Risk Assessment in a Swimming Pool?

It is generally recommended that individuals who conduct a risk assessment should have a comprehensive knowledge of the site and the purpose that it serves. In the case of swimming pools that individual should have experience of working in and managing swimming pools. The individual should have an insight into the activities that go on in swimming pools. He/she should be aware of the limitations that design and construction impose on the operation of swimming pools. WSI have fully qualified pool risk assessors available to assist pool operators.

Pool cover at a swimming pool

2.13 How to Conduct a Risk Assessment

The Health & Safety Authority recommends a five-step approach to conducting a risk assessment. These steps have been adapted somewhat to be more clearly focused on risk assessment in a swimming pool.

The five steps to conducting a risk assessment in a swimming pool areas follows:

- Step 1 Identify the hazards
- Step 2 Decide who might be harmed and how
- Step 3 Evaluate the risks and decide on precautions
- Step 4 Record findings and implement them
- Step 5 Review the assessment and update if necessary

Do not overcomplicate the process. The risks in swimming pools are well known and the necessary control measures are easy to apply. One should know the types of activities that occur in the swimming pool and what procedures must be put in place to either eliminate or control the hazard. These actions are known as control measures.

If you run a small leisure centre or swimming pool and you are confident you understand what is involved, you can do the assessment yourself. The Health & Safety Authority provides assistance on its website in the form of documents and tools, in the form of BeSMART.ie.

If you work in a larger organisation, you could ask a health and safety advisor to help you. If you are not confident, get help from someone who is competent. In all cases, you should make sure that you involve your staff in the process. They will have useful information about how the work is done that will make your assessment of the risk more thorough and effective. But remember, the operator is responsible for seeing that the assessment is carried out properly.

When thinking about your risk assessment, remember that a hazard is anything that may cause harm, such as chemicals, electricity, the storage of floats etc. The risk is the chance, high or low, that these and other hazards could harm somebody, together with an indication of how serious the harm could be.

Lifeguard securing lane ropes before training begins.

2.14 Step 1. Identify the Hazards

Walk around the swimming pools and associated environment and look at what could reasonably be expected to cause harm.

Ask your employees/colleagues or their representatives what they think. They may have noticed things that are not immediately obvious to you. Visit the HSA website, it has very useful advice. The HSA publishes practical guidance on where hazards occur and how to control them. It provides information on hazards that might impact your business. The HSA also provides information for managers and staff of small and medium sized enterprises providing practical advice on workplace health and safety.

Check manufacturers' instructions or data sheets for chemicals and equipment, they can be very helpful in spelling out the hazards and putting them in perspective. Have a look back at your accident and ill-health records - these often help to identify the less obvious hazards.

Remember to think about long-term hazards to health e.g. high levels of noise or exposure to harmful substances, as well as immediate safety hazards.

Assess the level of lifeguard cover for the different activities that occur in the swimming pool. Different activities and clients may require different levels of supervision to ensure a safe environment.

Additional consideration when conducting a risk assessment should also be given to the following subheadings:

Premises - the physical structure; pillars, blind-spots, lighting, steps, ladders, gradients

Equipment - plant & machinery, flumes, wave machines, power hoses.

Staff - under 18, older employees, staff under the influence of alcohol or drugs.

Customers - children, lone swimmers, cardiac rehabilitation groups, older swimmers and swimmers with disability

Operations – What actually happens; taking each programmed and un-programmed hour of the day and identifying the risks directly associated with that group, e.g. Water Polo, Mother & Baby Groups, Aqua Aerobic Classes.

Swimming pool sign

2.15 Step 2. Decide who might be harmed and how

For each hazard that you identify you need to be clear about who might be harmed, consider the facility users as well. It will help you to identify the best way of managing the risk. That does not mean listing everyone by name, but rather identifying groups of people who may be harmed e.g. pool users, lifeguards, swimming teachers, plant room operators.

In the case of each hazard that is identified, identify how they might be harmed, i.e. what type of injury or ill health might occur. For example, children may get into difficulties, non-swimmers may go out of their depth, lifeguards may be exposed to excessive noise.

2.16 Step 3. Evaluate the risks and decide the precautions

Having recognised the hazards, one then must decide what to do about them. The law requires a pool operator to do everything 'reasonably practicable' to protect people from harm. One can work this out for oneself, but the easiest way is to compare what you are doing with good practice.

There are many sources of good practice. One may go to the WSI, , Ireland Active HSA, HSE, CIMSPA, for advice concerning health and safety in general and the leisure industry in particular.

So, first look at what you are already doing, think about what controls you have in place and how the work is organised. Then compare this with good practice and see if there is more you should be doing to bring your swimming pool up to standard.

In your review, consider:

- Can the hazard be got rid of altogether? In many cases the hazard is central to the activity, i.e. water in a swimming pool, or a flume. Both are hazards but it is not practical to eliminate either and still have the activity available.
- If not, how can the hazard be controlled so that any harm is unlikely? Lifeguards are a good example of how a risk is controlled. The lifeguard acts to ensure the safety of pool users.
- When controlling risks, apply the principles below, if it is possible try to do so in the following order.
- Try a less risky option, e.g. switch to using a less hazardous chemical.
- Prevent access to the hazard, e.g. by lifeguarding.
- Organise work to reduce exposure to the hazard (Think of lifeguards and noise exposure).
- Organise the activity to minimise the risk of the hazard.
- The setting of rules for pool users. i.e. declaring the minimum heights and ages to use particular pool equipment or features.

In the case of employees - issue appropriate personal protective equipment e.g. clothing, footwear, gloves and provide welfare facilities e.g. first aid.

Placing mats down in changing rooms to reduce the chances of slipping is a low-cost precaution considering the risks. Failure to take simple precautions can cost you a lot more if an accident does happen.

Involve staff, so that you can be sure that what you propose to do will work in practice and will not introduce any new hazards.

2.17 Step 4. Record your findings and implement them

The safety statement is the place to record the significant findings of the risk assessments. This means writing down the more significant hazards and recording the most important conclusions. Writing down the results of your risk assessment and sharing them with the pool staff will keep them informed of the hazards and risks around the pool area. It will keep them up to date on changes to hazards due to new activities in the swimming pool such as children's swimming lessons or a scuba diving club hiring the pool for training.

Risk assessments cannot one be hundred percent perfect, but they must be suitable and sufficient.

You need to be able to show that:

- A proper check was made.
- You asked who might be affected.
- You dealt with all the significant hazards, taking into account the number of people who could be involved.
- The precautions are reasonable, and the remaining risk is low; and
- You involved your staff or their representatives in the process.
- If one finds that there are quite a number of improvements that one could make, big and small, do not try to do everything at once. Make a plan of action to deal with the biggest risks first. Remember to prioritise and tackle the most important things first. As an action is completed, tick it off the plan.

2.18 Step 5. Review your risk assessment and update if necessary

The activities in a swimming pool evolve over time. Sooner or later, new equipment will be purchased. It makes sense, therefore, to review what you are doing on an on-going basis. Every year or so formally review where you are, to make sure you are still improving, or at least not sliding back.

Look at your risk assessment again. Have there been any changes? Are there improvements you still need to make? Have your workers spotted a problem? Have you learnt anything from' accidents or near misses? Make sure the risk assessment stays up to date.

When you are running a facility it's all too easy to forget about reviewing your risk assessment - until something has gone wrong and it is then too late. Why not set a review date for this risk assessment now? Write it down and note it in your diary as an annual event.

During the year, if there is a significant change, do not wait. Check your risk assessment and, where necessary, amend it. If possible, it is best to think about the risk assessment when you're planning your change - that way you leave yourself more flexibility.

Risk assessments are specific to the pool that they are carried out for. All guidelines have to be adapted to the specific environment that they are being implemented in.

Some of the key areas that should feature within one's risk assessment include:

- Safeguarding Children.
- Workforce.
- Structural.
- Environmental.
- Operations.
- Activities.
- Glare & refraction on water.

These will be referenced throughout the document.

The design and operation of the Normal Operating Procedure and the Emergency Action Plan should be reviewed by a competent person to ensure their effectiveness in maintaining swimming pool safety.

3 Working in the Pool Environment

Lifeguard on duty

3.1 Introduction

This section examines the challenges that the pool environment presents, and the approaches one can take to ensure the safety of facility users.

3.2 Lifeguards

A fully trained lifeguard is a major resource in ensuring the safety of pool users.

Qualification: All lifeguards should hold a Pool Lifeguard qualification, recognised by WSI.

Please go to the WSI website for details on how to become a lifeguard.

The current WSI lifeguard pool lifeguard qualifications are in line with ILSE standards. They are ranked on the National Qualification Frame (NQF) as Level 5 for the shallow-water lifeguard qualification and level 6 for the deep-water pool lifeguard. The NQF is directly mapped onto the European Qualification Framework.

It is also essential that pool operators take suitable measures to ensure that all staff are suitable to work with those who are under 18 years of age as these make up a large part of the user numbers in many swimming pool facilities. History of current and potential new employees should be checked.

3.3 Duties of the lifeguard

While these may vary between facilities, the following are functions, which shall be included:

- Pool supervision.
- Apply the principles of preventative lifeguarding.
- Exercise an appropriate level of control over users.
- Take appropriate action during incidents.
- Perform rescues.
- Treat suspected cases of suspected spinal injury.
- Provide first aid, within the scope of one's qualifications.
- Provide Life Support when required, this includes the use of AED and Oxygen support.

3.4 Continuing Professional Development

It is considered best practice that lifeguards should undergo suitable training regularly, under the supervision of competent personnel. This is WSI policy. The WSI Pool Lifeguard Training manual can be used as a useful reference. Training should be reflective of the individual pool that the lifeguard is employed in.

This training must be recorded as evidence of on-going professional development. Written evidence is the most useful way of tracking staff training and it may be required or relied upon at a later stage.

3.5 First Aid

While it is not a general requirement that all lifeguards should have an Occupational First Aid/First Aid Responder qualification, they should however have an awareness of basic First Aid. WSI recommends that lifeguards should attain a First Aid Responder qualification.

3.6 Physical and Mental Fitness

Physical and mental fitness are the responsibility of the individual but on-going regular training sessions are advised, in addition to the requirements of CPD. A suggested method for self-monitoring is outlined in the WSI document "CPD for Lifeguards". Lifeguards should be tested for their ability to surface dive to the deepest part of the pool, if this is included within their area of supervision. This is to ensure that the lifeguard is competent to supervise a specific swimming pool.

Lifeguards are also personally responsible for issues of hydration, nutrition, warmth and sun protection (if working at an outdoor facility). Lack of attention to these aspects of general health will greatly impair the lifeguards' ability to perform their duties. This is part of the SHAWW Act (2005) that requires all employees to work safely and to co-operate with health and safety policies. The facility's risk assessments shall consider the lifeguard's standard of hearing and vision to ensure they are appropriate to the duties being undertaken.

3.7 Lifeguard Uniform

This should follow internationally accepted guidelines (International Lifesaving Federation) as follows:

1. Tracksuit bottoms, shorts and skirts should be red. Tops should be yellow
2. Uniforms should be appropriate to the situation, offering the lifeguard comfort while also ensuring that movement is not hampered.

This is illustrated in the photograph on the right.

3.8 Lifeguard Communications

Lifeguards are in the front line of customer education with regard to safe practices when using the pool and adjacent facilities. Therefore, all lifeguards should have good communication skills. Lifeguards should carry whistles or two-way radios for communication with other team members and pool users.

There should be a clearly defined alarm system in operation within the facility. This can be in the form of sirens, public address systems or other alarms.

Lifeguards should also have a direct line of communication both in the event of an emergency and for normal communications within the site. This can take the form of a telephone, two-way radio or alarm push buttons. The location of such an item of communications should ensure easy access for the lifeguard and immediate response by other facility staff and the EMS.

Communication systems shall be part of the NOP of all swimming facilities with specific guidelines in all E.A.P.s. The effectiveness of such systems should be continuously monitored with performance standards specified. Based on rehearsal and in line with new developments regular reviews of these systems should be undertaken.

3.9 Supervising the Pool Environment

Lifeguard Numbers: Water Safety Ireland recommends that at least one appropriately qualified lifeguard should be on duty at all times on the pool side, regardless of the level or type of activity taking place. When there is only one lifeguard on duty, suitably trained support must be available and easily contacted.

3.10 ILSE Recommendations for Pool Supervision

International Life Saving Europe in co-operation with the national lifesaving and lifeguarding bodies in Europe has set recommended standards for the supervision of swimming pools. These numbers are outlined in Appendix Three below.

3.11 Non-Programmed activities

Constant poolside supervision during all non-programmed activities is essential.

Having a qualified lifeguard on duty at all times on the pool side is important when one considers factors, which are outside the immediate control of the pool operator. These include the following:

- Swimmers may be of different ages, with a range of abilities and disabilities.
- Swimmers may have a range of health issues.
- Alcohol or food may have been consumed before swimming.

Weak or non-swimmers may stray out of their depth. Recommended guidelines for out of depth social swimming are:

- The bather should be able to swim 15m on front, 15m on back and tread water for 1 minute
- Diving or falling into insufficient depth.
- "Responsible persons" in charge may be unaware of the potential dangers associated with aquatic activities.
- Adherence to facility rules regarding hygiene may also be compromised.
- Signs and safety guidelines will not guarantee that appropriate behaviour will be followed.

Lifeguard changeover with an elevated chair

3.12 Programmed Activities

There should be lifeguard cover during all programmed activities. This is in line with ILSE policy on pool supervision[1].

The activity-taking place, the standards of those participating, their age, experience and the qualifications of those in charge, must be considered when carrying out the risk assessment. Where those in charge of the activity have a recognised, valid Lifeguard qualification the principles of suitable and immediate emergency support must apply.

3.13 Variation in Pool Dimensions and Pool Supervision

Due to the wide variety of swimming pool facilities and the many ways in which pools are used, specific recommendations with regard to lifeguard numbers cannot be made. General guidelines are made, which should be adapted to specific pools only after the completion of a Risk Assessment by the Pool Operators. Health & Safety legislation requires the conducting of risk assessment for all activities.

Where pool facilities include special features such as diving boards, wave machines, flumes, lazy rivers etc., are in operation the number of lifeguards on duty should be increased. A specific risk assessment should be conducted by the operator to estimate how many additional lifeguards would be required to ensure users safety. The supervision of these features will be discussed in a later section. WSI's National Pool Lifeguard Manual also provides advice on how to effectively supervise such water features.

[1] *ILSE Pool Safety Guidelines*

Pools vary greatly with regard to depth, length and shape.

The shape of a swimming pool will also influence the number of lifeguards on duty at any one time. All parts of the pool should be under the direct supervision of a lifeguard.

The water depth is an important factor to be considered when assessing how many lifeguards are required to safely supervise a swimming pool. The depth of water may lead to different levels of supervision.

Inappropriate illumination, poor acoustics, glare, poor ventilation, crowded conditions, turbulent waters and cloudy water are all aspects of swimming pools, which should be considered when deciding on appropriate lifeguard numbers.

These factors may also have a negative influence on the efficiency of the lifeguards' supervision (concentration, visibility, audibility). Lifeguard rota and duty structures should be arranged to counteract such negative influences.

Visibility through water will become a problem in pools, which are 16m wide or greater.

50m pools require extra attention in that visibility through the water and access to users in need of assistance becomes more difficult. Also, a number of different activities may take place in pools of this size at any one time, all with their own lifeguard demands. The importance of thorough risk assessments by appropriately trained personnel, with regular reviews, must again, be stressed.

3.14 Working Conditions

Swimming pools present additional problems when compared to many other working environments. Noise levels, glare, user numbers, types of activities taking place, features on offer and heat can all impinge on the lifeguards' concentration and efficiency, if ignored.

The NOP should clearly outline a system for rotation among lifeguards. This will help to alleviate boredom, will allow for breaks from the supervision of demanding areas, will allow for an increase or decrease of lifeguard numbers in line with expected or current usage and will allow lifeguards to exchange information relevant to the on-going safety of users. Rotation systems can be time, break or non-poolside duty based.

Where rotation systems exist, it is important to ensure that supervision continues during all changeovers. Please refer to WSI's National Pool Lifeguard Manual for more information on this.

3.15 Lifeguard Elevated Chair

The use of a permanent or moveable elevated chair may be helpful to lifeguards. A Risk Assessment should determine effective use.

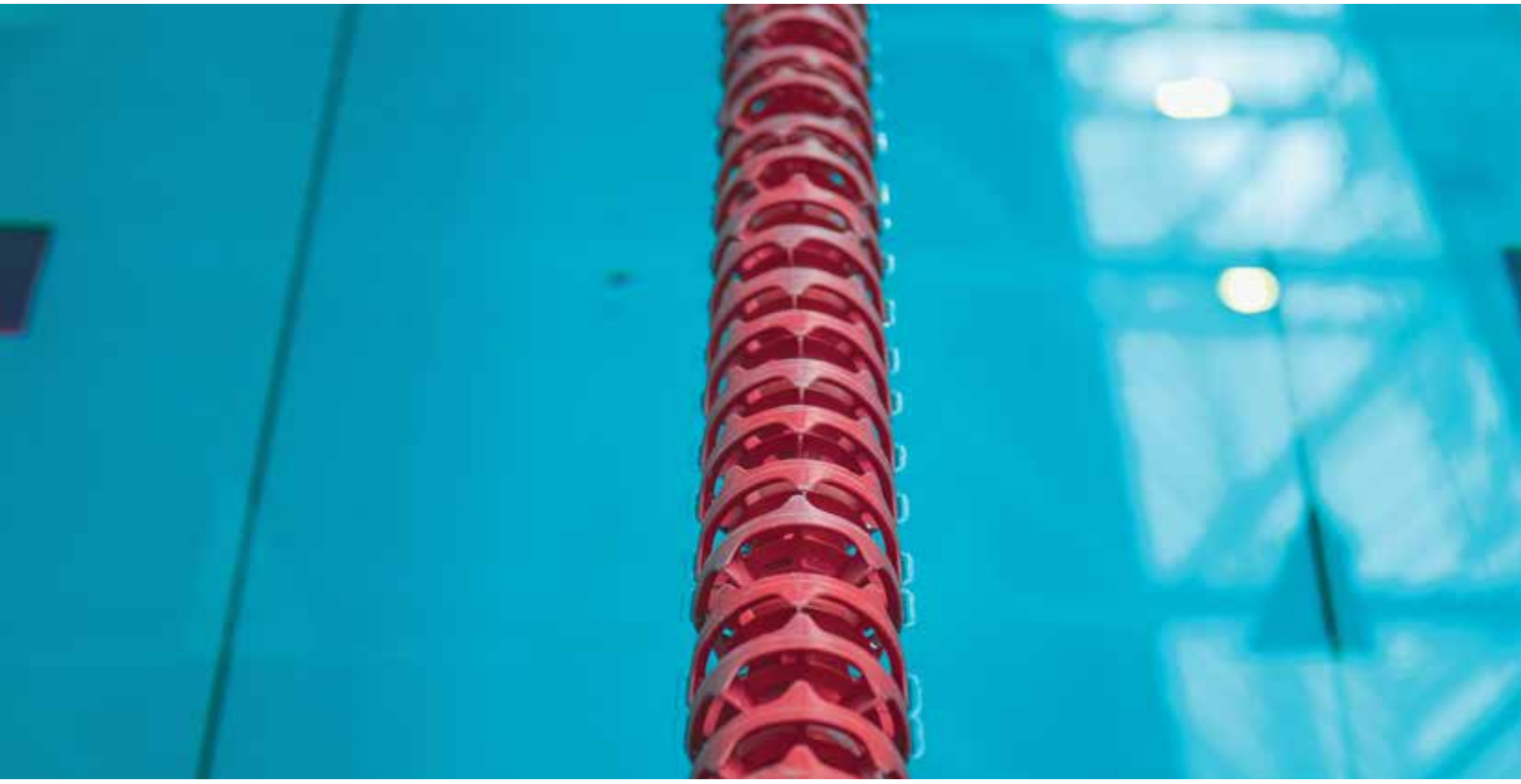
3.16 Effective Teamwork

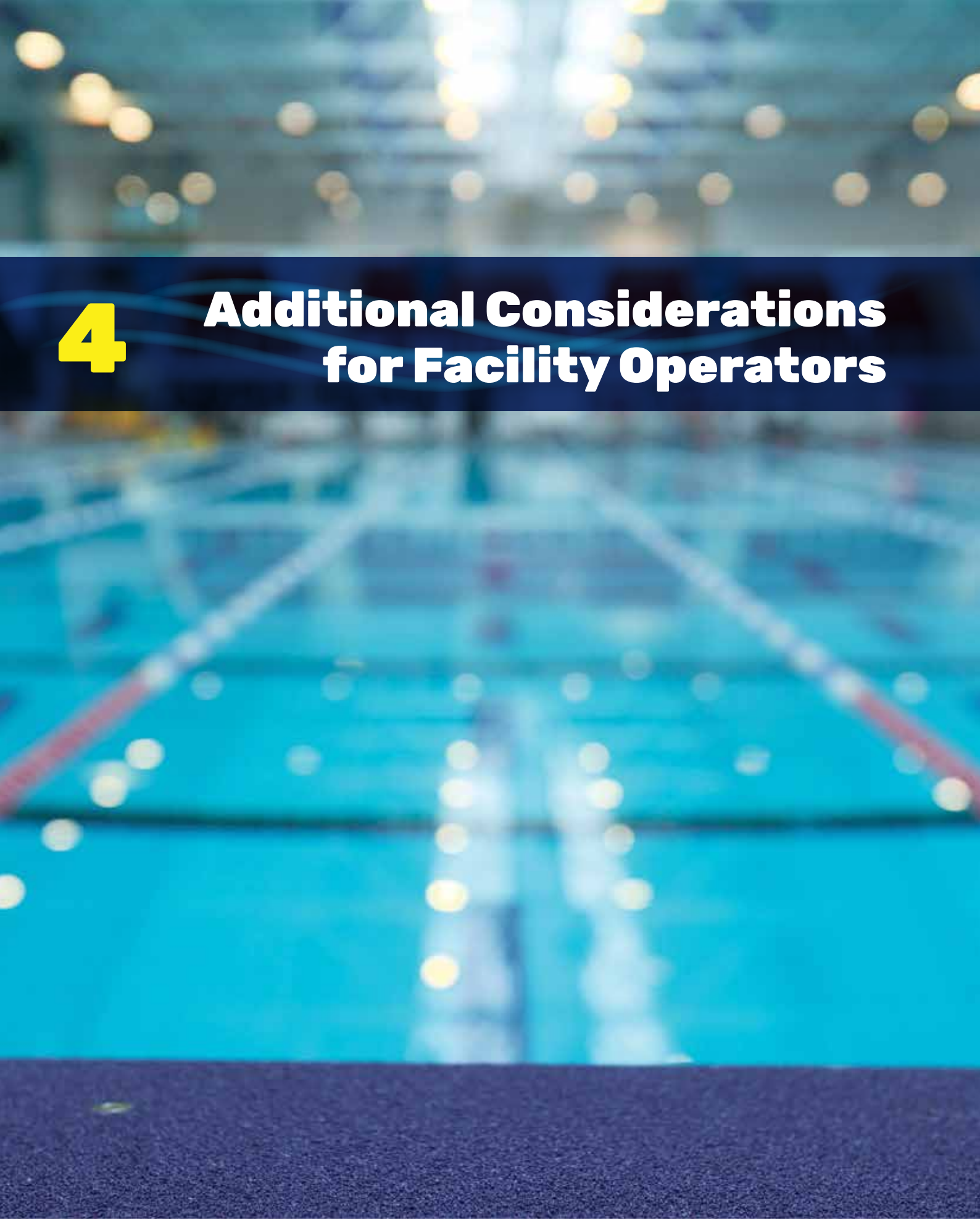
To ensure the development of an effective team it is recommended that regular team meetings be held and regular practice and review of EAP procedure is undertaken. Part time/temporary staff should also be included in such meeting and practices.

Completion of a recognised Pool Life Guard qualification will ensure an awareness of good practice as part of a team, the importance of helping colleagues at work and possible ways of responding to conflict within the group.

In order to retain validity, the lifeguard qualifications is required to be revalidated at least every two years.

Lifeguard using an elevated chair with torpedo buoy





4 Additional Considerations for Facility Operators

Rialtas na hÉireann
Government of Ireland
SÁBHÁILTEACHT UISCE NA hÉIREANN
WATER SAFETY IRELAND
Ireland Active
Leisure, Health and Fitness Association
SWIM IRELAND

4.1 Introduction

This section examines the ancillary areas of the swimming pool that operators should also take account of in terms of including them in the PSOP and how lifeguards should supervise them.

A risk assessment will guide the operator in the levels of supervision or checking required for:

- Showers and other washing facilities.
- Seating.
- Floors.
- Equipment (hair dryers etc.).
- Toilets.

Many facilities include some or all of the above as part of the lifeguard's duties. If so then the safety of pool users should not be compromised while such duties are being undertaken. Consideration should also be given to the completion of these extra duties during busy times. This may require higher staffing levels. It should be remembered that the primary function of lifeguards is pool supervision and safety; all other duties must not compromise this role.

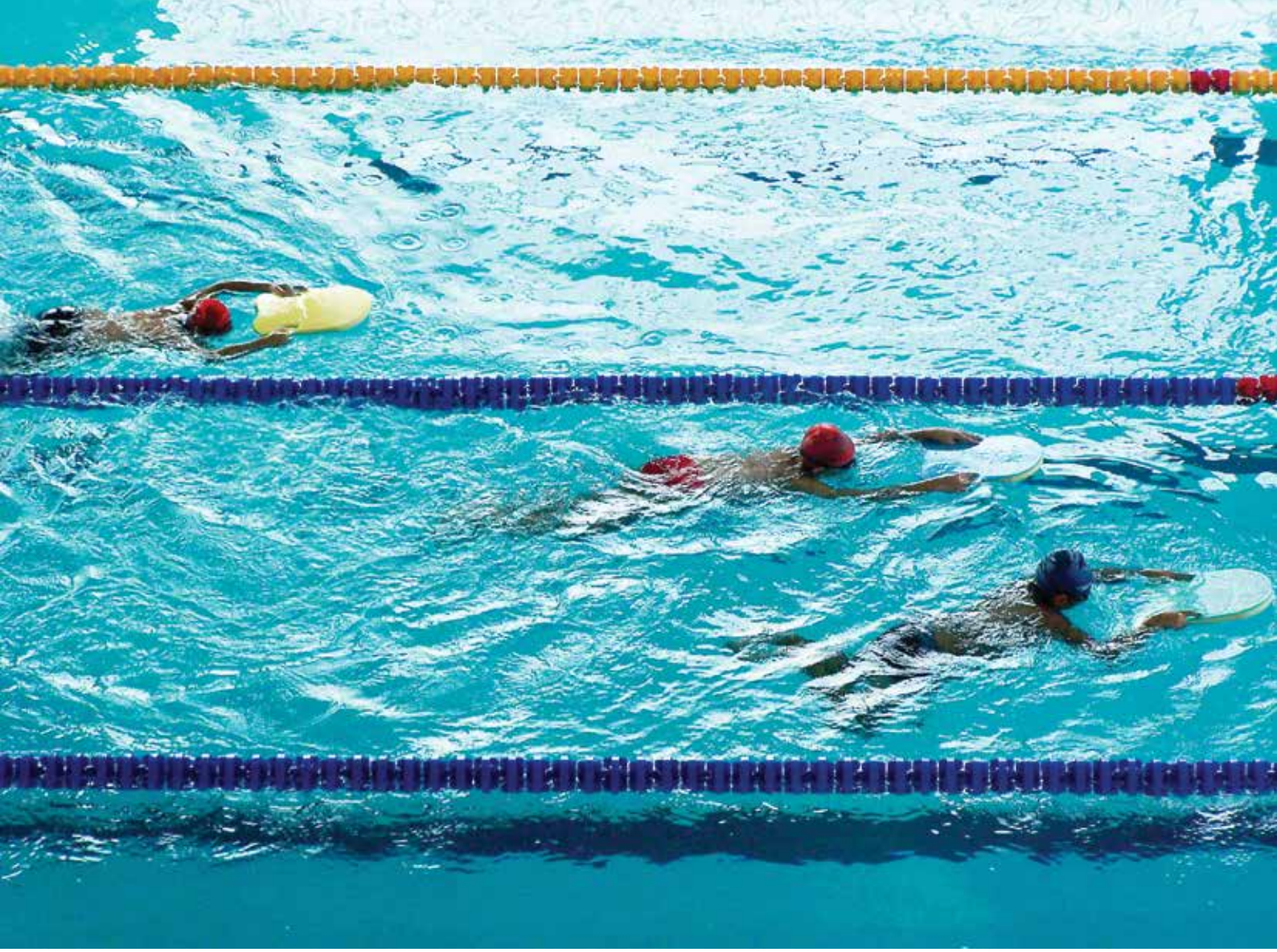
4.2 Hiring Out Swimming Pool Facilities

It is essential that all pool operators have clearly documented guidelines for hire to outside organisations. These will form part of the facility's Normal Operational Procedures. In such instances, consideration must be taken of the competencies of those in control of the particular activity and will be recognised in the Pools risk assessment. It is good practice that those who hire pool facilities are familiar and competent in the actions required within the facilities' EAP. This could be considered a requirement under the SHAWW (2005) legislation. It has become common practice in swimming pools that there is a qualified lifeguard on duty (more if the NOP requires it) at all times on the pool side when it is in use, regardless of the activity or if has been hired by a third party. This practice would seem to meet the duty of care that a pool operator has to its users.

4.3 Teaching and Coaching in a Swimming Pool

Clear Role: The role of the teacher /coach within swimming and other aquatic activities is one that is integral to the delivery of safe and effective activities to the benefit of the users. A teacher/coach holds a very different role to that of a lifeguard. However, the teacher/coach and lifeguard should always be encouraged to work as a team in ensuring safe practice is being carried out in the water.

The same recruitment procedures as referenced earlier in this section should also be used for the recruitment of teachers/coaches including vetting and advice and policies can be sought from the relevant member organisations. The teacher/coach should abide by the employing organisations guidelines and policies for safeguarding the welfare of facility users at all times.



4.4 Qualifications

There are a number of teaching and coaching qualifications that exist, and it is important that member organisation should be contacted for advice as to the level of qualification of that teacher or coach and the recommend ratios for particular activities with regards to that level of qualification. The ratios for swimming pool activities that are suggested by the different professional bodies can only act as guidelines for the pool operator.

4.5 Pupil Teacher Ratios

Pool Operators should ensure that best practice is being followed by all users e.g. teacher/pupil ratios.

A written risk assessment is necessary to determine specific pupil teacher ratios within each facility. In this context the risk assessment may be used to resolve two issue the first and paramount issue is the safety of the users. The second issue is deciding the issue for the effective teaching of a class.

The list of factors that are laid out below are relevant to any risk assessment that a pool operator would carry out over these two issues.

Factors which must be considered, include (this is not an exclusive list):

- Qualification of teachers, coaches, and helpers.
- Skill level of participants.
- Age of participants.
- The particular requirements of participants, for example, responding to the particular needs of an older person or a person with a disability.
- Water depth.
- Space available for the activity.
- Other water users.
- Safety equipment.
- Learning / teaching aids.
- Emergency back-up including lifeguard supervision and first aid.
- Reporting procedures.
- Swimmers with a disability.
- Pool layout and features.

Table 2.0 below, shows some generally accepted teacher/pupil ratios, which should apply when all of the above safety factors have been considered; these ratios have been developed with the philosophy of one fully qualified teacher with the relevant number of participants.

These are recommendations that relate to programmed activities with a formal structure, that is, supervised, controlled and continuously monitored from the poolside by an appropriately qualified person(s)

Adult and Infant (Baby) classes 12 pairs classified as 1 adult and 1 child)	12: 1
Non swimmers and beginners	12:1
Improving swimmers	20:1
Mixed ability groups	20:1
Competent swimmers (able to swim 25m on front and on back and tread water for 2 minutes)	20:1
Synchronised swimmers	20:1
Diving	12: 1 beginners and improver divers 15:1 Competitive divers
Water polo training	20:1
Aerobics in deep water	20:1
Aerobics in shallow water	30:1
Competitive swim training	30:1
Swimming sessions provided exclusively for persons with disabilities	Ratios can vary from 1:1 to higher ratios as outlined above, and will be influenced by the particular needs of the swimmers, the support available, and the depth of the water. Persons with disabilities participating in the session may be in a position to provide advice, as well as National Representative Disability Organisations.
Schools swimming	As above

Table 2.0

The ratios in above table are provided for guidance only. The ratios used must be determined by the dimensions of the individual swimming pool. The ratios above refer only to bather safety and not to the quality of learning and teaching that may be achieved by such ratios.

It is not possible to suggest specific ratios for each individual swimming pool, the different conditions that operate in individual pools means that it is imperative that a written risk assessment is carried out for each activity in a swimming pool, and a safe system of work devised prior to activities commencing.

Risk Assessments will determine more specific ratios, for individual facilities and their activities. The determined ratio should always reflect the swimming competence of the swimmer and the activity taking place

Factors which may influence the determination of facility appropriate ratios include

- Dedicated lifeguard observing the lesson only may permit the lesson ratio to increase.
- The availability of additional helper(s) on the poolside may permit a larger ratio.
- Additional helper(s) in the water may allow the ratio to increase.
- Poor definition of the teaching area may require the ratio to be decreased.
- Sharing the space with another activity may require the ratio to decrease.
- If the area is deeper than is suitable for that level of lesson the ratio may need to be decreased.

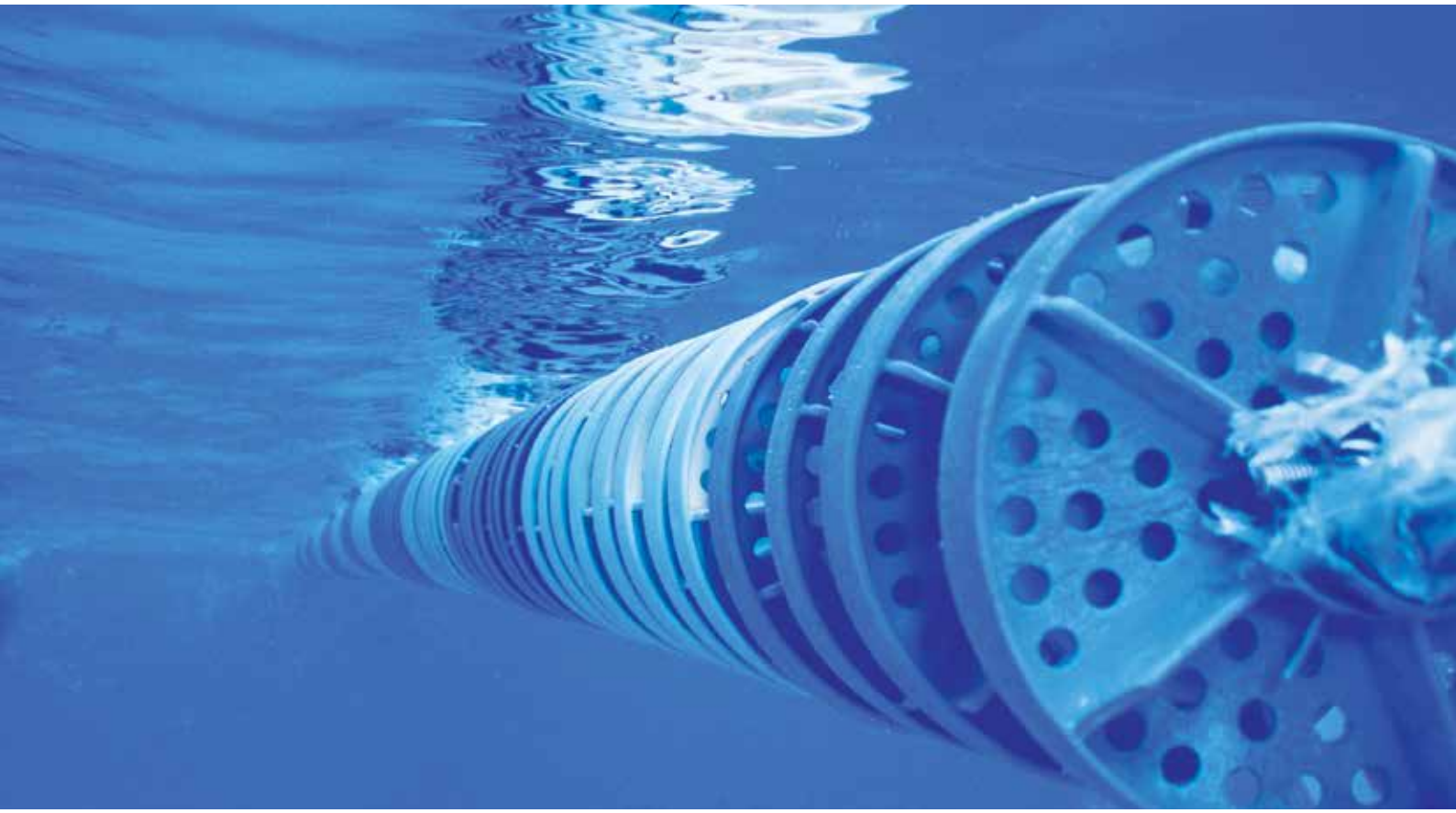
- Shallow water area may allow the ratio to increase.
- Teaching children in 'waves' keeping a % of the children out of the water may allow the ratio to increase (but this may reduce the quality of the lesson).
- Expansive diving facility configuration with safe spaces between the plunges may allow the ratio to increase.

WSI can advise on lifeguarding and lifesaving. WSI and SI can advise on disability teaching and swimming teaching qualifications, including qualifications for teaching persons with disabilities. SI can also advise on all other aquatic qualifications and offer similar advice on competitive swimming, diving, water polo and synchronised swimming. Other swimming pool users such as The Irish Under Water Council, or The Irish Canoe Union can advise on requirements for their specific activities.

4.6 Teachers' Responsibilities

Teachers and coaches must be trained and able to carry out their role in the pool's emergency action plan. They must ensure that the pupils understand and regularly practise their response in an emergency. The emergency procedures to evacuate the water and summon assistance are practised regularly in accordance with the requirements of the Emergency Action Plan. Safety considerations must always be paramount.

Pool Operators must be able to justify their decisions regarding lifeguard/teacher numbers in both a legal and a moral context.



4.7 The Assistant Teacher

An individual who holds the qualification of assistant swimming teaching is trained to teach under the supervision of a full swimming teacher. He/she should be viewed by the facility operator as a trainee teacher and must not have sole responsibility for the delivery of any programmed aquatic activity within a facility. The role of the assistant teacher is to assist a fully qualified teacher/coach.

There is a huge benefit to facility operators in having this teacher as part of the team as they can provide additional assistance and supervision to help maintain a safe aquatic environment.

Recommended ratios for the use of the assistant teacher under the supervision of an appropriately qualified teacher/coach are as follows:

6 pupils to 1 assistant teacher under the supervision of a fully qualified swimming teacher is the maximum that an assistant swimming may teach.

This ratio should be reviewed as part of the regular risk assessment practice.

4.8 Continuing Professional Development

It is considered good practice for coaches and teacher of all activities to regularly attend seminars and courses to update their skills. This is no different for swimming teachers. WSI and SI provides CPD programme that allows teachers to keep their qualifications up to date. It is considered good practice for all swimming teachers to attend regular update CPDs. Please refer to the WSI or SI swimming teaching manuals for details.

4.9 Working Conditions

Similarly, to lifeguards, swimming teachers also require consideration when working in the swimming pool due to the unique pool environment. Relevant breaks will help a teacher/coach maintain their concentration and efficiency at all times.

4.10 First Aid Provision

First Aid resources are clearly laid out in the Safety Health & Welfare at Work Act 2005. It should be referred to by all leisure centres when deciding the level of first aid provision that is required for their particular site.

A specifically defined first aid station should be adjacent to the swimming pool area of the facility, which is easily reached by the EMS. Its location should be clearly shown on the facility's NOP. First aid equipment should include the following:

- A removable screen or curtain to protect the privacy of the casualty.
- A medical examination couch with blankets and pillows.
- Hot and cold water.
- Good ventilation.
- A nearby toilet.
- Chairs
- Spinal Board
- AED, Oxygen and Suction Equipment, if staff have been properly trained.
- A fully stocked First Aid box, with clearly defined restocking levels.

Lifeguards may not have a full First Aid Responder (previously known as Occupational First Aid) qualification, but they should have a good foundation in first aid awareness. WSI recommends that all lifeguards should seek to become fully qualified as HSA/PHECC recognised First Aid Responders.

An example of a Lifeguard's First Aid Equipment.

4.11 Safety Equipment

This can be defined under two headings

1) General and

2) Personal.

4.11.1 General Safety Equipment

This should include throwing items such as ring buoys and throw bags. It also covers reaching aids such as poles. A variety of such items should be available and accessible to lifeguards on duty as they have general and specific application. Lifeguards should be able to access a piece of safety equipment in approximately 5 seconds. Lifeguards should be trained in the used of all rescue equipment that is available to them. Not all rescue equipment would have formed part of the lifeguard's initial training.

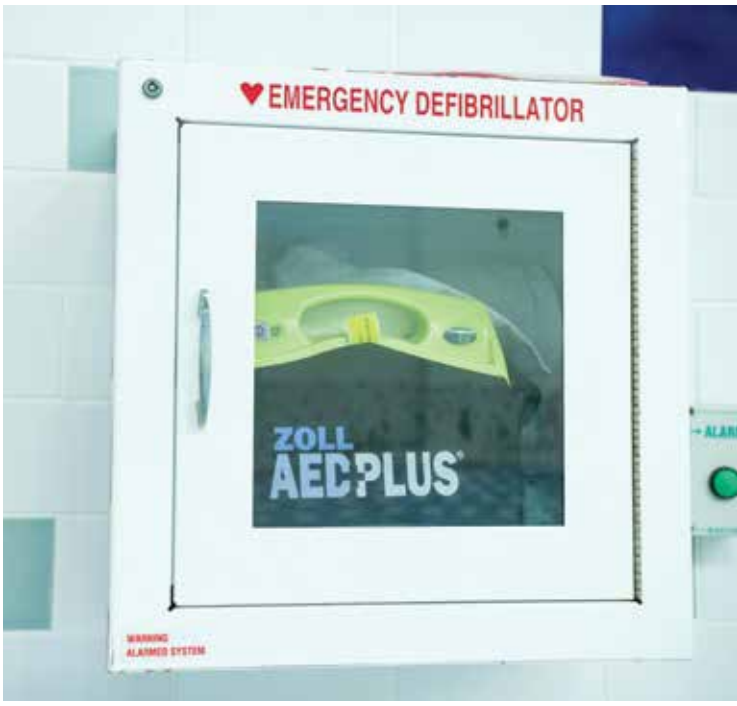
The quantity and types of rescue equipment required for a swimming pool should only be decided after a risk assessment has been conducted. It is very difficult to envisage a situation where by no rescue equipment is required in a swimming pool when it is in use.

The type of ring buoy used should follow the recommendations of WSI and should be mounted approximately 1.33m high on the walls to ensure clear visibility and access by all.

Ideally lifeguards should always have in their possession an item of safety equipment. This can include any of the items previously outlined such as a rescue tube or a throw bag.

Other items of equipment, which should be available and accessible for the working lifeguard include, spinal boards, AED and Oxygen equipment. Full training in their use must be provided. The recommendations of the relevant training authorities should be followed with regard to re-validation and on-going training. Records must be kept by pool operators to ensure best practices are followed.

All facilities should have a fully stocked first aid box. First aid boxes should meet HSA



A wall mounted, and easily identifiable AED (Automated External Defibrillator).

requirements as a minimum but best practice would require that they reflect the hazards identified by the risk assessments.

The locations of all first aid boxes should be clearly identifiable with markings, which satisfy Health and Safety Laws. All first aid boxes should be fully stocked with clearly defined re-stocking levels and a clear procedure as to who is responsible for the re-stocking of items when necessary. The level of first aid provision and where this will be delivered shall be set out in the facility's NOP.

All safety equipment should be of a type approved by WSI and all lifeguards should be trained in its correct use. Practice for the effective and correct use of rescue equipment should be included during staff training as part of staged accident scenarios. This equipment should be in good repair and be subject to daily checks, which are recorded.

4.11.2 Personal Protective Equipment

This should include items such as gloves, masks and protective clothing. The provision of such items is a requirement under Irish health and safety legislation.

Communication systems should also be included under this heading because many operate as back up to the lifeguard during an emergency. Included here is access to telephones, push button alarm systems, portable radio alarm systems and whistles or bells.

All approved safety equipment should be used and stored in accordance with the manufacturers' guidelines and be checked regularly.

Pool personnel should be trained and familiar with the safe use and storage of this equipment.

Safety equipment should be checked daily with the outcome of such checks, and any remedial actions required, recorded.

Lifeguard with ring buoy positioned on the pool side wall

Leisure facilities should have a clearly defined action plan for the repair and/or replacement of items. This can be part of the facilities NOP.

4.12 Communications

Communications and communication equipment have been referred to earlier. However, it requires particular attention in all modern swimming pool facilities.

Areas which shall be attended to include:

- Communications between poolside staff.
- Between supervisors and staff.
- Between the public and facility staff.
- With the press.
- With the emergency services.

The facility's NOP should clearly define the existing lines of command. It should also define who is ultimately responsible for issues such as dealing with customers and in particular, communicating with the "Press". The facility manager normally fulfils this role.

Lifeguards and others responsible for safety should be able to attend to their areas of responsibility without distractions. It will of course be necessary for such personnel to communicate with members of the public and customers, but this should be limited and within their areas of responsibility. Unnecessary and prolonged communications are a source of distraction.

Communication with the emergency services is a crucial area of concern within any leisure facility. A clear procedure for call out should be defined and practiced on occasion. This procedure shall define WHO makes the contact and WHEN they make it. All staff members should have a thorough knowledge of how to call the EMS and under what circumstances they are contacted.

All facilities should have a clearly identifiable telephone, which can be used for contacting the EMS. Relevant contact numbers should be clearly displayed.

Lifeguards should have a means of communicating with other facility staff when there is an emergency. This is particularly important when a facility has occasion to have a single guard on duty (ref to earlier section regarding lifeguard numbers). This can take the form of sirens or alarms. Portable 'push button' alarm systems may also be considered.

4.13 Public Address System

An audible PA system for communications with facility customers should be in place in all facilities. This will be important in emergencies and for general communications. This system should be checked for efficiency and audibility at regular intervals. This will be necessary when one considers the abrasive effect of some of the chemicals being used in modern swimming pools and other variables, which will influence the acoustics.

Lifeguards should know and practice defined systems for communication between themselves. These can be through the use of whistles, hand signals or buzzers. Again, consideration must be given to the many possible barriers to communications within the swimming pool environment, like glare, noise, acoustics etc.

Ireland is now a multi-cultural society. This implies different languages. Use of communications other than verbal is recommended as a solution, particularly as emergency signals.

Example of ringbuoy & rescue rope

Swimming pool facilities must also consider the needs of people who are deaf or hard of hearing. This will be achieved through the use of some form of visual communication system, combined with other recommended methods.

Emergency lighting both permanent and incident specific e.g. flashing, will suit.

Communication with children should always be conducted in an open environment. A private conversation can be held in a public place and this safeguards not only the child but also the adult.

4.14 Safety Signs

Signs fall under the following three categories and should follow the colour scheme recommended by ILSE:

Prohibition – indicate activities, which are not allowed or show areas where a particular activity will present a danger e.g. diving. Such signs should be on a white circle with red edging and should contain a black pictogram indicating the danger.

Warning – indicate where there may be a danger if some caution is not exercised e.g. changes in depth, slippery surfaces etc. This type of sign should be on a yellow triangle with a black edge and black symbol.

Swimming pool depth notice

Mandatory – outline procedures that must be followed in order to ensure customer safety and satisfaction e.g. safe practices when swimming. These should be on a blue circle with white outlined symbols.

Using pictograms will ensure that non-readers understand relevant messages. Pool operators can choose suitable pictograms, which will help maintain a safe pool environment in accordance with the International Standards Organisation.

The use of auditory signals can also be used to supplement written signs e.g. to indicate that the wave machine is being turned on. Such signals will also greatly assist people who are blind or have low vision.

It is essential that all signs are easily seen and suitably placed in relation to the message being displayed.

Pool operators and lifeguards must ensure that all signs remain free of obstruction e.g. towels, clothing etc. It is also essential that the information displayed on any sign is up to date and accurate. For example, changes to the pool layout may affect the accuracy of information on any particular sign.

Example of pool sign

4.15 Rules & Regulations

Rules and regulations will be facility specific and should be influenced by the facility's written Risk Assessments. List of standards and common regulations that should be considered for display to the public will relate to the following:

- Opening and closing times.
- Hygiene rules.
- Use of changing rooms.
- The supervision of young children.
- Use of glass bottles.
- Swimming ability required for specific activities e.g. entry into deep end.
- Use of equipment.
- Chewing gum.
- Use of swimming hats.
- Use of any type of photographic equipment, in line with child protection policy.

In addition, it is recommended that all swimming pools should have rules that forbid running and discourage shouting.

Due to the ever presence of water on pool floors, slipping is likely if care is not taken.

Shouting, when combined with the acoustics in most swimming pools, can have a negative effect on the lifeguard's concentration and ability to hear relevant emergency signals.

4.16 Normal Operation Plan/Procedure – NOP

It is a legal requirement that all facilities shall have a written operational safety statement. The NOP forms part of this statement. It outlines the general operation, working routines and safety measures of the swimming pool. The NOP must be documented and reviewed at least once a year.

The following should be included as a minimum in a NOP: (This is not an exhaustive list.)

- An Organisation chart that stakes out the line of authority, individual responsibilities and allocation of responsibilities of various members of the staff.
- A description of the pool and the pool area, such as; dimensions, depths, special features, access, first aid stations etc.
- The most common hazards and risks identified in the Risk Assessment and how to deal with them.
- Instructions when to turn from the NOP to the EAP.
- Control of admission to the pool. This should at least include;
- Access control at the reception, specific regulations regarding user groups with permission to enter, age policy regarding minimum age to enter the pool without parent, security arrangements to secure unauthorized access when the pool is closed.
- The maximum number of users at one time. This should be set in line with the safety requirements of all visitors as well as the capacity of the pools water treatment plan.
- Instructions on dealing with a visitor or plant overload.
- The most vulnerable target groups, especially children 0-6 years.
- Pool lifeguard duties and responsibilities.

Wet floor signs may be required after cleaning or after classes.

- Pool lifeguard rescue equipment.
- Surveillance and supervision policy.
- A routine how to ensure a sufficient communication line between facility staff and pool staff.
- Management of the pool when being used by specialist groups for example; clubs and users with special needs.
- Use of pool equipment.
- Use of first aid equipment and where it is located.
- Facility staff training according to the RA.
- Management of special features and event.
- Conditions of hire.
- Actions to be taken in case of non-compliance.
- Child Admission Policy. These are summarised in the next section.

A guiding principle would be that any activity that impacts on the operation of the swimming pool should be included in the NOP and hence the safety statement.

Risk assessment will be necessary to ensure maximum bather numbers are set for particular circumstances, for example, sessions for children, sessions provided exclusively for persons with disabilities, special activities such as canoe water polo.

Pool shape and depth are required to be considered in busy periods, bather loadings will be assessed at the point of reception and numbers should be communicated to the relevant personnel for operational considerations.

Risk Assessments may include:

- A particular section of the pool if it is unusually busy.
- Lifeguard duties and responsibilities.
- Facility staff training; qualifications and arrangements for on-going continuing professional development.
- Management of special features and events.

An example of an area where diving is unsafe and not permitted.

- Use of pool equipment.
- Management of the pool when being used by particular groups, for example, clubs and sessions provided exclusively for persons with disabilities or for older people.
- Pool safety equipment available and where it is located.
- Conditions of hire.
- What actions a lifeguard may take if a customer refuses to co-operate with the facilities rules.

4.17 Emergency Action Plans/Procedures - EAP

When operating with general public and a large scale of different user groups it is more or less a question of time before an accident will occur. When so happens, an adequately and detailed EAP must enter in force. The role of an existing EAP cannot be overestimated as a support for the pool lifeguard and operator. As well in case of emergency, as well as the knowledge of its existence and there for ensure a good psychosocial work environment. The EAP stands separate to the NOP and as with the NOP it forms part of a swimming pool's safety statement. The EAP is comprised of a series of responses to foreseeable incidents that the centre's staff trains to respond to. The EAP should contain what a centre will do in the event of one of these incidents occurring.

The EAP must be documented and reviewed at least once a year. At least the following should be included:

- When to raise the alarm.
- A chart over the most important functions to handle an emergency. Such as:
  - » A first aid situation.
  - » Start an evacuation.
  - » Sharp and simple instructions of the most urgent actions. Step by step.
  - » When to go back to NOP.
- The EAP should at least detail instructions and actions regarding the following incidents:
  - » Drowning.
  - » Heart failure to a user.
  - » Overcrowding.
  - » Outbreak of fire.
  - » Faecal contamination of the pool water.
  - » Emission of gases.
  - » Chemical spillages.
  - » Missing person.
  - » Allegation of child or vulnerable adult abuse.
  - » Disorderly behaviour.
  - » Structure failure.
  - » Bomb threat.
  - » Lightning failure.
  - » Breaches of the pool´s admission policies.

It is impossible to predict and plan for every eventuality in and around the swimming pool environment but there are a number of foreseeable emergencies, for which, one can pre-plan. Such pre-planned scenarios should be included in the facility's written EAP

The above list is not an exhaustive list of possible events and each facility will need to identify the foreseeable event that will impact on its operations, and the extent of this impact.

4.18 Surveillance Cameras

Use of surveillance cameras must be advised to facility users.

4.19 Mobile Phones

Mobile phones and their use should be banned/prohibited from defined areas within the facility. A risk assessment should determine your policy.

4.20 Camera/computer Surveillance

The use of surveillance cameras and sensors are useful to assist the lifeguard with pool supervision, but they are not acceptable as a replacement for the presence and supervision of properly qualified personnel. It is important to note that these should be placed in open public areas excluding changing rooms.

5 Pool Supervision & Pool Features

Rialtas na hÉireann
Government of Ireland
SÁBHÁILTEACHT UISCE NA hÉIREANN
WATER SAFETY IRELAND
Ireland Active
Leisure, Health and Fitness Association
SWIM IRELAND

5.1 Introduction

There are recognised European standards that cover many aspects of pool design and operation (including swimming related equipment). The European Union has set standard for both swimming pool design and operation. These are:

EN 15288-2:2008 swimming Pools safety requirements for operations

EN 15288-1:2008 swimming Pools safety requirements for design

Modern facilities are now offering a wide range of other features as an added attraction to their patrons. It is an error to generalize the risks associated with such features. All have their own peculiarities and should therefore receive individual attention when completing the facilities' risk assessment. There are, however, a number of requirements, which apply to all such features as follows:

At the design stage, great attention must be paid to the positioning of:

Bends, Steps & Rails on all pool features. Such features should be adequately protected against corrosion. This can be achieved through adequate maintenance.

The following should also be considered

- They must be staffed by an adequate number of lifeguards. This will be dictated by the risk assessment. The aim of the risk assessment is to ensure that the feature will operate safely.
- Lifeguard cover for such features shall not compromise the supervision of other parts of the pool. As well as lifeguard cover, rules as to how it operates will be required. These rules will be based on the risk assessment.
- Lifeguards should be aware of the potential dangers, their causes and prevention. All operatives must be trained in the specific use and supervision of any features. This comes under the requirement of site-specific training.
- Lifeguards should be aware of the excitement caused by these features, which may lead to erratic behaviour by the users.
- Lifeguards should be constantly aware of the water clarity surrounding such features.
- Adequate signage outlining the rules for use and giving users advice, on the dangers and restrictions.
- Rules for safe use must be strictly enforced.
- Operators and those supervising must know how to turn off the equipment if necessary.
- Regular checks and proper maintenance of all feature fittings e.g. water slides and flumes. This must be carried out by a competent person.
- Regular checks should also ensure that bolts remain tight on all ladders, handrails and steps.
- Manufacturers guidelines should be strictly adhered to.
- Access to all such features should be prevented when not in use.
- These features should be referred to in facilities' NOP and EAP.

In addition to the above, the more commonly available features also have their own specific safety guidelines. These are outlined in the following paragraphs. These should only be taken in the context of a site-specific risk assessment of the particular feature.

5.2 Wave Machines

A common factor associated with this particular feature is the presence of high surrounds, necessary to contain the water. This will have an effect on people leaving and entering the water. It is hoped that the design of the wave machine will minimize the risk of people being thrown together or against fixed objects, such as walls, rails or ladders. The strength and height of waves will create a number of associated hazards as will the varying water depth often found in and around these features. Lifeguards and other operators should be aware of these. Pool operators are required to design safe operating systems for the pool features that are their centres.

It is the work of other bodies to ensure that the construction conforms to EU safety standards. Along with recommended signage, an audible signal, which signals the start of the machine, should be in place. Weak and/non swimmers should be requested to move to the side prior to the machine being switched on. Lifeguard shall be positioned, so that, they are able to supervise between the waves, supervise the beach area (attending to those being knocked over by the water) and have an overall view of the area. Diving under the waves shall be prohibited. Entry shall be from the shallow end only. A system shall be in place to ensure users are aware of changing wave patterns and strength.

5.3 Rapids or Jet Streams

These are often designed with dips, bends and varying speed of water flow. These design features can combine to give whirlpool effects. There are many potential hazards and dangers associated with their use especially for the weak or non-swimmer. Proper control and supervision will ensure safe and enjoyable use of these features.

In addition to the above general guidelines, the following feature specific guidelines should be adhered to:

- Lifeguards shall be placed at the entrance and exit to assist users in and out.
- The positioning of lifeguards should allow for the rescue of panicking, injured or unconscious

users while constant supervision is maintained. The facilities EAP shall detail actions, which will ensure constant supervision.

- The flow of users should be controlled to prevent congestion during the ride.
- If such features are fully or partially outdoors, measures should be in place to ensure adequate protection of lifeguards from the prevailing weather conditions.

5.4 Inner Tube Rides

These may be combined with other features.

Some dangers associated with such feature include overturning, falling off, hitting the sides, getting trapped underwater or stopping, leading to impact injuries from other users.

In addition to the above general guidelines, the following should also be enforced:

Lifeguards shall be placed at the entrance and exits to help users in and out.

User rules shall be strictly enforced to prevent horseplay that could give rise to some of the feature specific dangers referred to above.

The stacking of tubes should not be allowed.

Allow one person per tube only.

5.5 Slow and Fast Rivers

These are usually shallow, level and may be circular or twisting streams of water. Booster pumps are used to maintain a steady current. Users swim or float along with the current. Tubes are often used in conjunction with this feature.

In addition to the general guidelines above, the following specific requirements should also be implemented:

Lifeguards shall be placed at the entrance and exit to help users in and out of the river.

Jumping and diving into the river should be prevented.

A system shall be in place to ensure that maximum user capacity is not exceeded at any time.

5.6 Waterfalls, Water Canons, Geysers

Rain Sprays and Mushrooms: These are some of the other features common to many modern facilities.

Although they are relatively basic features, all have possible associated dangers.

Water spray may interfere with supervision.

In addition to the general guidelines for swimming pool features, additional attention is required to the following aspects:

- The operation times of these features shall be regulated to ensure the build-up of gases and fumes is prevented.
- Water pressure on such features should be checked regularly.
- Super chlorinate regularly and check for legionella bacteria.
- A slow, low-pressure start-up will assist with safety.
- Geysers should only be used in water depths greater than 0.7 m.
- Many safety features should be included at the construction stage.

5.7 Water Slides and Flumes

These can vary from, being fixed in place to the being inflatable and removable. Each type has its own associated dangers. The necessity for regular checks and risk assessments on all features, has already been stated in the general guidelines at the start of this section. Air pressure will be an additional concern if the inflatable type is in use.

The facility's NOP and EAP shall outline the necessary actions for safe use and emergency procedures.

In addition to the general checks, lifeguards/ supervisors shall be aware of the extra dangers associated with the wearing of potentially dangerous items of jewellery. It is also essential that other users keep the landing area clear.

Acoustic and visual signals should be used to regulate the use of slides.

In addition to the general guidelines made in relation to all pool features, the following requirements should also be followed:

There should be an entry point and exit point lifeguard on duty during all periods of use

Ensure good communication between the supervising lifeguards

The 'entry' point lifeguard should ensure the following;

- Queuing remains orderly.
- Dangerous jewellery is not worn and removed where necessary.
- Swimsuits with metal rivets, buttons or fasteners shall not be allowed.
- A feet first sitting position is taken for flume ride.
- Legs are crossed at the ankles with the arms folded across the chest for free falls and speed rides.
- Safe spacing is maintained between customers.
- and Users going in chains or groups are prohibited.
- Running starts are not used as a means of gaining extra speed.

The 'exit' point lifeguard shall ensure the following:

- The landing area is cleared immediately after landing.
- Users do not cross in front of other slides.
- Disoriented users are assisted to exit immediately - Children, people who are weak swimmers or non-swimmers and persons with disabilities or older persons may require assistance from turbulent splash-down areas.
- Diving into splash down areas is prevented.

E.A.P.s shall be in place to ensure that injuries and other emergencies are dealt with immediately, while other users are under continuous supervision.

All supervising lifeguards have a joint responsibility to ensure that users do not slow down or stop while in the flume.

Small slide

All of the above can only be phrased as guidelines. The conducting of specific risk assessments for each feature must be carried out and a safe system of use and supervision devised.

5.8 Moveable Floors and Bulkheads

These are features being included in the design of many modern swimming pool facilities, particularly in 50m facilities. Their purpose is to give variety to pool length and depth. They greatly increase the potential uses of the pool. Children, older people, and persons with disabilities may benefit from the availability of these features. In addition, swimming, water polo and diving competitions, teaching, and

aqua aerobics classes are examples of areas which can benefit from the availability of these features.

In addition to the general requirements for all features, the following are also required:

- There shall be clear depth indication where there are movable floors.
- Audible warning signals shall be used when adjustments to depth are being made.
- Adjustments should be made while the pool is empty and with users away from the immediate poolside.
- Correct and regular maintenance, in line with the manufacturer's guidelines shall be carried out by appropriately qualified personnel
- Swimmers shall not be allowed under bulkheads
- Lifeguards shall be able to scan both sides of the bulkhead. Their positioning will be guided by risk assessments
- Lifeguards shall be able to scan both sides of the bulkhead. Their positioning will be guided by risk assessments.

5.9 Pool Hoists

These enhance the accessibility of swimming pool and associated spa facilities for a range of user ability. They can vary in style from being hydraulic, electric or mechanical.

Again, the general guidelines, outlined at the start of this section, also apply to hoists. In addition, the following requirements should be followed:

- Ensure all operatives are trained in the correct operating procedures.
- The differing abilities of users must be taken into consideration.
- Snap shackles should be used to prevent slings floating free from the supporting arm.
- Along with the recommended regular safety checks, special consideration shall be given to ensuring the hoist continues to be able to lift up to its specified safe working load.
- Manufacturer guidelines must be adhered to.

5.10 Hot Tubs and Spa Pools (Jacuzzis)

This feature has become popular in many swimming pools and may be located adjacent to the pool or in a separate health suite.

It must be noted that "Legionella" is a significant danger associated with the use of spas and has led to fatalities. Pool water quality is not a feature of this guideline, for further information you are advised to consult with Ireland Active.

Operators/lifeguards also need to be very conscious of the fact that hot water may be a cause of passive drowning - in particular if alcohol has been consumed. Water temperatures greater than the maximum recommended 38 degrees Celsius are also a particular danger.

The general requirements regarding the need to follow the manufacturers' guidelines, operatives trained in safe operating and emergency shut down procedures and adequate signage being in place, all apply.

In addition, the following extra requirements shall be followed:

- Spas need to be adequately supervised by lifeguards as outlined in the risk assessment
- An alarm button, to summon help in an emergency, shall be provided.
- Using the Spa after intense physical exercise or after using the sauna is not recommended.
- Entry and exit from the Spa should be done carefully, to avoid falling or slipping. Lifeguards shall promote such safe practices.
- Spa use is not recommended for those who are pregnant or who suffer from cardiovascular or respiratory problems.

Hot Tubs/Jacuzzi

- Use by children under 16 years of age shall not be allowed.
- Spa running time should be set, to help limit use to a maximum of 15 minutes, with rest intervals of at least five minutes between uses.
- Users shall be prevented from jumping or diving into the spa.
- Submerging under the water in the spa shall also be discouraged.
- Food, drink, body lotions or oils should not be allowed into the Spa.
- Where the Spa is part of a separate health suite, shower facilities should be provided for use before using the spa.
- Qualified personnel should carry out correct and regular maintenance.

5.11 Swimming Pool Covers

These are now a commonplace feature of most swimming pools. They serve both an economic and a minimal safety purpose. Most modern covers are automatically operated wall mounted systems. Older systems may be manually operated, these should be avoided because of the manual handing concerns arising from their operation.

Economically they help to conserve water temperatures with resulting savings in fuel costs. They also benefit environmentally by reducing the relative humidity in the atmosphere, enabling a reduction in air temperature and ventilation rates.

Finally, it is essential that all operators ensure staff are familiar with the safe operating procedures relating to the use of such covers and that safe handling techniques have been taught and practiced under the supervision of a suitably qualified person.

Pool cover over swimming pool

5.12 Inflatable Play Features

This type of equipment can vary from the small self-inflated e.g. rings as referred to above, to the large anchored type. The latter are usually anchored and kept inflated using electric blowers.

Lifeguards must be ever vigilant when large inflatables are in use, as these can obstruct vision of areas surrounding and under the structure. Poor visibility can greatly increase associated dangers.

The facilities' risk assessments will provide guidelines regarding the appropriate number of lifeguards required to ensure best supervision.

As a minimum safety guideline, it is recommended that no more than one square meter of the pool bottom is obscured to the lifeguard. Correct zoning of lifeguards will greatly decrease this area.

Lifeguards should also have to be vigilant towards overcrowding, robust play, smaller and younger users who may be knocked over by others. Facilities should prohibit diving from the structure or jumping from the poolside onto such structures.

In addition to the risks referred to above, falling off the structure may lead to submersion and possible panic.

Overcrowding on the structure may weaken the anchors.

5.13 Rafts and Rigid Play Equipment

These have dangers similar to those associated with the use of other types of inflatable play equipment, and include:

- Floating into deep water with poor or non-swimmers on top.
- Falling off can sometimes lead to disorientation.
- Jumping on to the raft from the poolside can lead to a range of possible injuries.
- Falling or jumping off such rafts close to the pool walls can provide the potential for injury.
- Impact injuries to users or others if the structure is a solid type.

The following requirements will enforce the safe and enjoyable use of this type of equipment:

- SpecSpecify suitable times for its use.

Mushroom feature

- Check for damage and replace if necessary.
- Ensure adequate qualified supervision
- Prevent dangerous and over-robust behaviour.
- Follow manufacture's instruction for maintenance and cleaning.

5.14 Paddling Pools and Children's Play Areas

These may be provided within the pool hall or as an outdoor facility. Such areas can incorporate many of the items of play equipment already referred to. The following are the recommended requirements:

Signage must indicate dangers and restrictions (age, height etc.) as well as user advice.

- Warning signs should be in place regarding the dangers of sunburn, where the facility is outdoors.
- A responsible person should always accompany children. This shall be specified in the "Swimming Pool Child Admission Policy"
- An EAP for lost children should be in place and familiar to all lifeguards and facility staff.

There will always be a chance that the area will be used as a toilet (accidental or otherwise). Clearly defined procedures shall be in place to deal with such situations.

Children's play area in a swimming pool

Because of the high usage of such areas, water quality, close monitoring of water quality on a regular basis will be necessary.

Such areas may not require constant supervision, due to the requirement to have a responsible person present, but it will be necessary to make regular checks to ensure all rules relating to safe use are being adhered to, including the avoidance of sunburn.

5.15 Use of Electrical Equipment at Swimming Pools

The dangers of electricity when associated with water are well known and documented. Safety and Health legislation makes guidelines for safe working practices when electricity is used adjacent to water.

Safety, Health and Welfare at Work (General Application) Regulations 2007 impose duties on employers and employees in respect of electrical equipment and installations and in respect of work activities on or near electrical equipment. Because this legislation may be subject to change from time to time, it is important that all concerned remain up to date with new developments.

As previously mentioned, many extra features are now available in swimming pool facilities. Some require the use of electricity. Examples include; automatic pool vacuums and electric blowers used to keep some structures inflated to the proper level.

Some general cleaning equipment is also electric powered.

Electric hair and hand dryers are readily available in facility washing and changing areas.

Regular checks on all electrical equipment is essential for the following reasons:

- The acknowledged dangers associated with its use in or near water.
- The corrosive effects of many chemicals used in and around swimming facilities.
- The dangers associated with possible panic if there is a power cut.

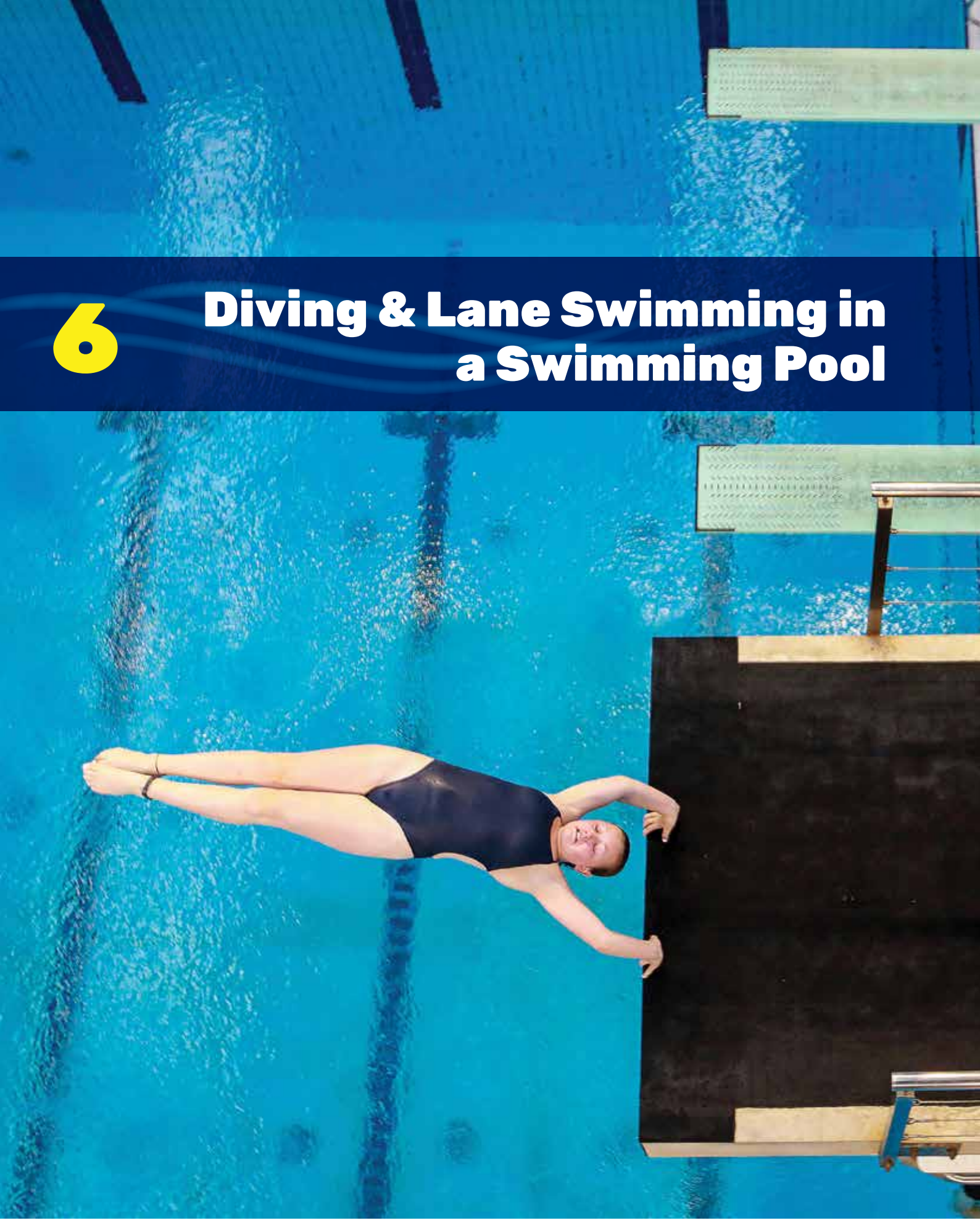
Some general guidelines are as follows:

- A qualified electrical engineer must make frequent checks on all electrical installations and equipment. This includes wires and plugs. The facility's NOP shall provide an outline for all such checks.
- Using equipment designed for use while immersed in water, is recommended. This equipment can be designed for use with a 12-volt battery.
- Using and testing residual current breakers shall be regular.
- Avoid the use of 220-volt equipment.
- Use portable electrical equipment that operates at 110 volts or below.
- Use a safety-isolating transformer that is suitably earthed and which conforms to Irish standards.
- Prevent as much as possible to all electrical equipment and wires.

5.16 ILSE Recommendations for Pool Supervision

International Life Saving Europe in co-operation with the national lifesaving and lifeguarding bodies in Europe has set recommended standards for the supervision of swimming pools. These numbers are outlined in Appendix Three below.

6 Diving & Lane Swimming in a Swimming Pool



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6.1 Introduction

This section examines the activities of diving and lane swimming in swimming pools. In recent years there has been an increased restriction on pool users diving in unprogrammed activities. However, it is still a very popular activity for swimming classes. If diving activities are not safely organised injuries may occur. Modern swimming pools tend to have multiple activities going on at any one time. Lane swimming for fitness and other reasons has become very popular. The arranging of lanes for swimming needs to be given adequate attention by pool management.

6.2 Diving

If diving from starting blocks or the pool side is allowed, consideration must be given to the supervision of this activity, the competence levels of the users and the effects of resulting waves on those in adjoining sections of the pool.

Along with being a very enjoyable activity, diving is also an important survival skill. In general, the teaching of diving, while following strict safety guidelines should be encouraged.

"Diving and Jumping in Swimming Pools and Open Water areas" published by the CIMSPA contains comprehensive information on diving and deals with a number of aspects of diving which may have relevance to particular pools and/or situations. In addition to this some of the main points are summarised with regards to operating the activity of diving in a facility:

There are many aspects to diving. It can mean a competitive start, or a competition within itself. Diving can also be an activity that is taught by swimming teachers, or it can be something that is done during non-programmed sessions in the swimming pool. Each of these activities requires a separate risk assessment and a written operating procedure prepared as part of the pool's NOP. Signs prohibiting diving should be displayed where it is considered unsafe to dive from the poolside. This signage must conform with relevant standards.

6.3 Teaching of Diving as an Entry or Competitive Start

In this context diving is viewed as a way of entering the swimming pool or a competitive start. The minimum facility guidelines for teaching diving are;

- Specific pool area where there is no swimming
- Flat racing dives only
- Pool Depth 1.8m
- Maximum Freeboard 0.38m
- Forward clearance 7.6m

A qualified WSI/SI swimming teacher or equivalent should carry out the teaching of diving. There are pre-requisite skills that a swimmer must be competent before he/she may proceed to learn to dive.

For additional information of the teaching of diving please go to WSI's National Swimming Teachers Training Manual (2018) or contact SI.

6.4 Diving in Non-Programmed Activity or Public Swimming

There has been a trend in swimming pools to prohibit diving during public swimming sessions. This has resulted in a decline in the number of diving related injuries occurring in swimming pools. It is up to each individual swimming pool operator to decide if diving will be allowed during public sessions.

Any risk assessment should take into account the minimum dimensions and skills required for safe diving.

At a minimum the following types of activities should be prohibited in all parts of the swimming pool during public swimming:

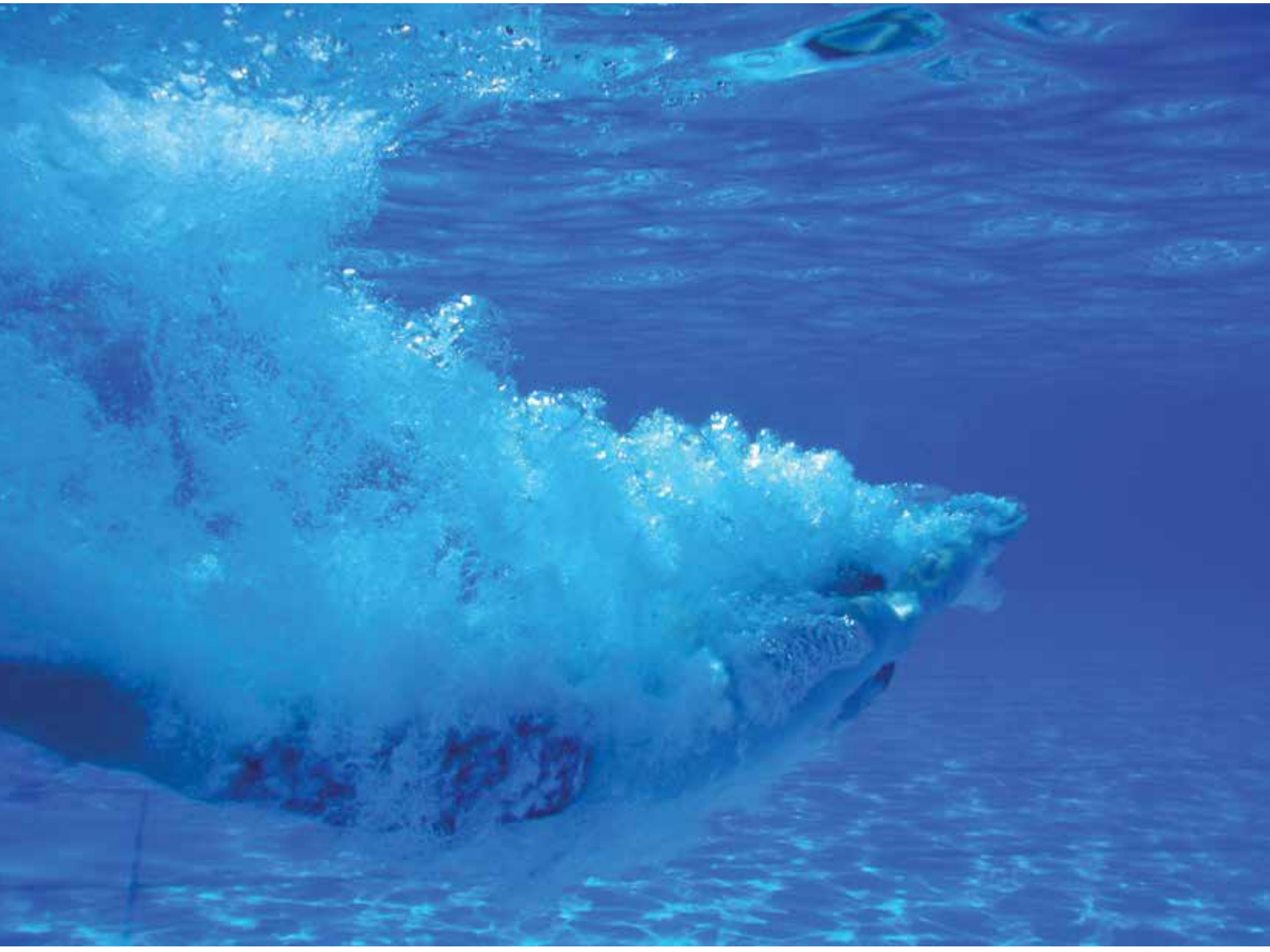
- Running diving.
- Backward diving.
- Dives without hands in front of heads.
- Indiscriminate diving.
- Somersault entries.
- Tuck Jumps/ "Bombing".

Negligence, where diving is concerned, may range from inadequate supervision to a lack of appropriate signage. Pool users can be a principle factor in diving accidents.

6.5 General Diving Considerations

The activity of diving into swimming pools should be risk assessed at all times. Diving should be limited to specific areas if a purpose-built facility is unavailable. Lifeguards must be constantly alert for unsafe diver practices e.g. bombing. Clearly visible and legible signs must indicate where and when diving can take place.

It is essential that all divers are aware of the pool depth. Competitive diving boards and starting blocks must conform to FINA design standards. Ensure diver competence is assessed before progression to diving from starting blocks. Hire agreements/ contract should indicate conditions of use for diving equipment. Diving and scuba diving equipment use should be separate). Only fully trained personnel should undertake the setting up of diving equipment e.g. starting blocks. All diving equipment should be safely stored to prevent use outside of scheduled hours. The use of goggles by learner divers should be discouraged because of the dangers of injury to the eyes.



6.6 Teaching with Diving Boards and Platforms

Learning to dive from platforms and boards must be done under the supervision of a competent teacher. All diving activities should be risk assessed and written procedures developed to ensure that the activity is conducted in a safe manner. All staff that supervises the diving area must be able to dive to deepest point and recover a casualty.

The FINA requirements for diving platforms and springboards are to be found in the FINA Facility Rules where a detailed table of dimensions and diagrams provide a complete set of measurements and sizes for the board configurations in relation to the pool hall, the pool and other boards. This information is accessible on the FINA website at www.fina.org.

The minimum requirements for diving from a platform:

Height of Platform	Minimum Water Depth
1.0m	3.5m
3.0-5.0m	4.0m
10m	5.0m

Where diving boards are available, the following requirements and user guidelines should be included as minimum requirement for the safe operation of the facility:

- Scheduled times of use should be outlined.
- Strict supervision must apply at all times.
- Assess the competence of users before use.
- Do not allow queuing on the ladders.
- Where steps to the diving boards exist, lifeguards should ensure that orderly queues prevail at all times.
- Do not permit sitting on the platform guardrails.
- Allow one diver on the board at a time.
- Ensure divers on higher boards have the right of way.
- A second diver must not follow until the previous diver has re-surfaced and swam clear.
- Allow one bounce only before diving on springboards.
- Allow dives from the front of the board only.
- Prohibit hanging from the boards.
- Hand first entries shall be required.
- Request users to swim to the side of the diving area, immediately after resurfacing. Supervising lifeguards shall ensure this practice is adhered to.
- Prohibit swimming across the diving area.
- Pay particular attention to divers using or attempting to use goggles, due to the dangers of injuries to the eye.
- Users suffering from colds and/or ear infections should be discouraged from diving board use.
- Lifeguards must be mindful of disorientation that may result from deep dives. Panic and running out of breath might also result from such dives.

Lifeguards need to be conscious of the possibility of impact injuries occurring when users high dive or hit the water at an awkward angle. Such incidents should be catered for in the facility's EAP.

Failure to achieve appropriate forward clearance can result in injuries caused by impact with the boards themselves.

6.7 Lane Ropes

The use of lanes will be greatly enhanced if a clearly visible pace clock is displayed. This will help with the management of spacing between swimmers. Also, using directional signs at the end of each lane will help guide the direction of swimming when two or more lanes are being used side by side.

There are European Standards that pertain to the design, fixings, storage, and maintenance of lane ropes. We would recommend that you review these and implement the standard accordingly. These standards are contained in I.S. EN 13451 for swimming pool equipment.

The lane ropes themselves require special attention to ensure ongoing customer safety and satisfaction. The ropes should be of good quality and their condition must be checked regularly, in line with the manufacturer's guidelines and the facilities operations plan. Problems that occur which require immediate attention include:

Missing discs and rope-floats can expose areas of wire or rope, which can result in skin burns and cuts when contacted strongly.

Missing discs and rope-floats can also result in swimmers miscalculating their distance from pool ends.

Broken discs and rope-floats will also result in bad cuts and bruises when rubbed against.

The cable ends of steel ropes can become frayed with the potential for minor and serious injuries as a result of incisions.

Lane rope attachments can loosen leading to lanes narrowing and/or widening. This can lead to impact injuries for users.

The storage of ropes must ensure they do not impede access points or create obstructions for users and lifeguards. Safe procedures for taking up and putting down lanes must be in place to ensure staff welfare and safety. This can form part of staff training programmes.

Lifeguards have a crucial role to play in the management of lanes allocated for sole use. They must be proactive ensuring that lane etiquette is adhered to and that lanes remain in good repair.

Good management will be furthered if customers are aware that lanes are being used at particular times during the facilities operating hours. Clubs and other sole users must also be informed of the conditions of hire and associated facility procedures.

6.8 Lane Swimming

A majority of swimming facilities now operate a multi – use policy for their swimming pools. The demand on pool operators to provide lanes is currently on the increase. Facilities differ in the number of lanes they are able to provide at any one time. Lanes are now being used for a variety of reasons, including:

- Fitness swimming.
- Swimming lessons.
- Triathlon training.
- Social swimming by older people.
- Competitive training.
- Sub aqua training.
- Lifesaving training.

Swimming pool operators may decide to have times exclusively used for lane swimming, when a number of activities are taking place consecutively.

The use of lanes demands a number of management considerations, to ensure the ongoing satisfaction and safety of users. These will include:

Allocation of swimmers of varying abilities and speeds to lanes to ensure requirements are met.

Describing lanes as "fast" and "slow" is subjective and dependant on swimmer interpretation. Defining use in objective terms such as time or distance bands may be preferable.

Ensuring a well-defined policy of "lane etiquette" is outlined and known to users. This policy will include procedures for overtaking, use of equipment (fins, paddles etc) and direction of travel in adjoining lanes.

Defining who get use of side lanes will also help with good management. Priority should be given to weak swimmers who may require the security of being near the side wall. Some older people or persons with disabilities may fit into this category. People who may require the use of ladders or the pool hoist for entry and exit should also be given side lane priority Defining who gets use of side lanes will also help with good management.

Swimming lessons and technique development and lifesaving sessions are more effective if teachers and coaches can observe swimmers' movements directly.

7 Pool Equipment and Pool Users

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7.1 Introduction

This section considers the use of equipment by pool users. This may be equipment that they have brought in themselves or equipment that is supplied by the centre. This includes sinkers and balls, or small and large inflatables. It also looks at the equipment brought in by the pool users themselves.

7.2 Swimming Goggles

Swimming goggles are now, an almost essential piece of equipment, used by the majority of visitors to swimming pools. They are primarily for swimmer comfort in that they protect from the negative effects

of swimming pool water on the eyes and improve visibility in the water.

They come in many styles, from prescription to regular, and come in a wide variety of colours.

As with all pieces of equipment, they also have some associated dangers.

Putting goggles on in an improper manner may lead to injuries around the eye area. Lifeguards should be prepared to advise regarding safe use. Manufactures provide instruction and these should be followed

Swimmers engaging in “horse play” or robust activities e.g. ball-playing games may injure others with whom they come into contact.

Poorly fitting goggles can lead to impeded user view, with resultant possible impact injuries.

The controlled use of goggles during some activities is advised, e.g. diving or lifesaving.

7.3 Play Equipment

Along with the many pool features now available in many facilities, there is also a wide variety ofplay equipment available. Such equipment may be provided by the facility or privately owned by the customers and may range from being small to large in size. Uses can vary from being fun to helping with the development of aquatic skills. Regardless of the purpose, all have a certain degree of risk associated. Pool operators and lifeguards should have an understanding of these in order to prevent accidents.

Some general safety guidelines for the use of such equipment include:

- Never allow the use of glass equipment.
- Provide adequate signage to indicate when and where equipment may and may not be used.
- Check equipment for safety on a regular basis. Some types of equipment e.g. inflatable arm bands, should be examined before every use.
- Small toys, balls etc should not be less than 7 mm in diameter as a precaution against choking.
- Safety checks shall ensure conformity to minimum safety standards.
- Ensure equipment being is appropriate to the age of those using it.
- Equipment should only be used under proper supervision.

The following are some of the more common types of play equipment used in modern swimming pool facilities and associated risks:

Snorkels: These are normal in the teaching of sub aqua and snorkelling but today, they are used in the teaching of swimming.

Lifeguards shall be alert to the possible dangers associated with “horse play” by users e.g. the airway being blocked by others.

Improper use can result in water inhalation.

Use should be limited to scheduled sessions e.g. sub aqua or to users with a perceived competence in use.

7.4 Face Masks

These vary in appearance and quality. Operators should be familiar with the risks associated with masks breaking, in particular those with glass faces.

Masks that are too tight fitting can lead to facial or eye injuries.

Badly fitted or poorly sealed masks can result in water getting under the mask, with possible inhalation of water through the nose or disorientation due to blurred vision.

Limiting the use of this type of equipment to scheduled times will greatly decrease the possibility of accidents occurring.

7.5 Fins/Flippers

Fins are used during a wide range of activities, from general recreation to competitive swimming. Their use is no longer limited to the traditional uses of snorkelling and sub aqua. Fins are manufactured with a wide variety of lengths and with differing strengths.

Lifeguards and facility operators should be aware of the following:

- The use of fins can cause cramp for new and untrained users.
- Some fins can be hard in rigid and stiff and may cause injury to others.
- They may lead to impact injuries with other users or walls.
- Due to the size of some types of fin, space for other users can be limited.

In general, it will be best to limit the use of fins, to scheduled sessions, where use is under the supervision of suitably qualified personnel. Alternatively, define a specific area for fin use.

7.6 Floats/Woggles

These are common items of equipment in most swimming facilities. Generally, the operator provides them, but recently they have become a popular piece of personal equipment. Floats, like so many other pieces of equipment, have very positive uses in the teaching and development of swimming and are a great aid to aquatic fitness. They come in many shapes and sizes.

Pool operators and lifeguards should be aware of the following, with regard to floats:

Users sometimes bite the floats, with a resultant danger of choking.

Abusing floats can result in pieces blocking inlets and outlets. This can lead to problems for the water treatment system. The use of polystyrene floats shall be discouraged

The use of floats can give rise to a false sense of confidence, which may encourage users into deep water.

Floats should be securely stored. This will help to control use and ensure the pool deck is free from obstructions.

Limiting the use of floats to scheduled sessions or defined areas, is recommended.

7.7 Rubber Swimming Rings

These seem to be declining in popularity in swimming pools. However, they still turn up and they can vary in size and style.

Lifeguards and pool operators should be aware of the dangers posed with their use include the following:

- May give rise to a false sense of security, which may encourage users to enter deep water.
- Small children may slip out of the ring.
- Users may capsize when using these rubber rings.
- Rings may deflate, thus highlighting the need for a safety check before each use.
- Some rings have air valves or stoppers protruding, which may result in injuries or to easy deflation.
- Diving through or jumping on top of such rings shall be discouraged due to the dangers of impact with the pool bottom/sides.

Lifeguards must be especially vigilant when this type of equipment is in use. Centres should have a policy regarding their use in the swimming pool. This should be based on a risk assessment.

7.8 Play Balls

There are a large variety of these available. They are used during water confidence exercises for the very young. As with all equipment used in water, there are some possible associated dangers.

Ball throwing games in the swimming pool may lead to robust behaviour, with particular danger for poor/weak or non-swimmers:

Timid swimmers may panic when trying to avoid being hit by a ball.

Swimming after a ball into deep water may be particularly hazardous for poor swimmers.

The excitement of getting to the ball may have a negative effect when assessing dangers.

Small balls in use in the swimming pool shall be no less than 7 mm in diameter, to prevent swallowing by children.

Balls shall be suitable for the age group for which they are being used.

The use of balls should be encouraged in structured sessions under the guidance of appropriately qualified personnel for example a water polo coach.

7.9 Weighted Rings/Blocks

These are common pieces of equipment used for the development of water confidence, surface diving and early diving practices. Safety guidelines include the following:

Water depth should be appropriate and suitable to the ability level.

When in use, clear visibility of the bottom is necessary.

Ensure the area in use for practices with this type of equipment is clear from other users.

Safe spacing shall apply between users, if in a learning group.

8 Safeguarding the welfare of children

8.1 Introduction

The welfare and safety of young people and children is an accepted principle for everyone involved with or working with young people in a professional or voluntary capacity. A child is legally defined as being under the age of 18 years, unless married. Swimming pools provide an outlet for many children from a social, physical and sporting point of view. Visits to swimming facilities are popular for schools, youth organisations, community groups, and families alike. All activities involving children and young people are legally required to have safeguarding measures in place.

The Safeguarding of children and vulnerable adults while using the facility is a key responsibility of all staff members and all policies and procedures put in place must make it easy for staff members to report any concern they may have.

8.2 General Considerations for Child Safety & Welfare

Safeguarding measures for pool facilities must meet the following:

The Children First Act 2015

Children First: National Guidelines for the sand Welfare of Children (2017)

Using the Children First Act and Guidance organisations and pool facilities must develop safeguarding policies to advise and implement these polices where young people and children are at risk of harm of abuse.

The Children First Act 2015 places specific obligations on facilities and organisations that provide services to children and young people, including the requirement to:

- Keep children safe from harm while they are using the service.
- Carry out a risk assessment of harm of abuse to identify whether a child or young person is at risk while availing of the service.
- Develop a Child Safeguarding Statement that outlines the policies and procedures which are in place to manage the identified risks of harm of abuse.
- Appoint a Relevant Person to be the first point of contact in respect of the facility or the organisation's Child Safeguarding Statement.

A template documents for developing a Risk Assessment of Harm and a Child Safeguarding Statement can be found in Appendix 1.

8.3 Safeguarding policies and hiring groups

Facilities may have external groups e.g. sports clubs, training groups etc. seeking to hire the facility or part of the facility for private use. The facility must ensure that any external group involved with children and young people is cognisant of their responsibility with regard to the Children First Act 2015. Facilities should maintain a record of any such group including confirmation of their Safeguarding policies and procedures together with the name and contact details of the Designated Liaison Person. The facility should ensure this is recorded in any contract with such a group.

8.4 Safeguarding Policies

Safeguarding policies should include:

- Recognising and Reporting Child Abuse.
- Poor practice and Whistleblowing policy.
- Safeguarding Training.
- Vetting (see section on vetting requirements).
- Safe recruitment of staff including the appointment of safeguarding roles in the facility.
- Anti-bullying policy.
- Supervision policy.
- Complaints and disciplinary procedures.
- Photographic and Filming policy.
- CCTV policy.
- Behaviour – users and spectators.
- Physical contact involving children.
- Inclusion and disability policy.
- Communications and use of social media.
- Other policies as required to cover other risks of harm of abuse to children and young people.

Facilities should refer primarily to Tusla Guidance and policies. Facilities may also refer to policies provided by Water Safety Ireland, Ireland Active and Swim Ireland for additional guidance on developing facility specific safeguarding policy.

See Appendix 1 for links to Tusla Child Safeguarding Guidance and policies.

8.5 Safe recruitment of staff

A Safe Recruitment Policy must be followed for employing staff in the facility or organisation in respect of roles involving children and young people with particular attention to ensuring the legal safeguarding requirements are met as well as undertaking fundamental best practices e.g. obtaining references and checking identity. Guidelines on safe recruitment can be obtained from the Tusla website at https://www.tusla.ie/uploads/content/Tusla_-_Child_Safeguarding_-_A_Guide_for_Policy,_Procedure_and_Practice.pdf

All staff, on or prior to appointment, must be trained in the procedure for recognising, reporting and management of child safeguarding concerns. Staff must be informed, during the induction process, of the safeguarding roles appointed in the organisation and/or the facility:

See Appendix1 for recognised training agencies.

8.6 Vetting

Vetting is required according to the following legislation and information:

Civil Service Commissioners Act 1956

Child Care Act 1991 – Sections 5; 61; 65

Children's Act 2001 – Section 258

Children First Act 2015

Criminal Justice (Spent Convictions and Certain Disclosures) Act 2016 Part 3

Data Protection Act 2018

General Data Protection Regulation (EU) 2016/679 (GDPR)

National Vetting Bureau (Children and Vulnerable Persons) Act 2012 to 2016

Private Security Authority Act 2004

Facilities must have a vetting policy to reflect the requirements of the above legislation.

The National Vetting Bureau are the vetting body responsible for processing vetting disclosures in Ireland. See https://vetting.garda.ie

Disclosures can only be obtained from an organisation registered with the National Vetting Bureau.

Facilities may use a registered organisation providing the services of an umbrella body to obtain vetting disclosures.

The roles requiring vetting are set out clearly in the legislation and these must be listed in the facility's Vetting Policy. As a general rule, any individual aged 16 years or over, in role with access to or involved in the training of children legally requires an acceptable vetting disclosure to be obtained before commencing working with children.

Anyone aged 16 or 17 years old in a role requiring vetting, requires parent/carer consent to obtain a vetting disclosure.

Children under 16 years old are not permitted to be vetted.

The facility's Vetting Policy should state what is an acceptable disclosure for employing individuals (either paid or as a volunteer). Vetting an individual prior to commencing working with children and young people is part of the safe recruitment process.

8.7 Safeguarding Training for Staff

It is recommended that all staff receive safeguarding training and this should be provided by a suitable recognised agency, It should be noted that some staff members may require safeguarding training appropriate to their roles. e.g., lifeguards, swim teachers, receptionists, DLPs etc.

Safeguarding training must include (taken from Best Practice Principles for Organisations in Developing Children First Training Programmes, Tusla):

- Knowledge of the Children First Act 2015 and Children First: National Guidance.
- Understanding of the role of Tusla and An Garda Síochána in protecting children.
- Understanding of the roles and responsibilities of mandated persons as assigned under legislation.
- Understanding of the role and responsibilities of designated liaison persons.
- Knowledge of the types and features of abuse.
- Knowledge of the factors which may make children more vulnerable to harm.
- Guidance in responding to a disclosure of abuse from a child.
- Review the reasonable grounds for concern and the thresholds for reporting.
- Knowledge of the importance of confidentiality and record-keeping.
- Knowledge of how to report child protection welfare concerns.

All staff must be aware of the procedures for recognising and reporting allegations, concerns or disclosures of abuse. The details of such will be in the facility's policy.

See Appendix 1 for a list of training providers.

8.8 Designated Liaison Person

A Designated Liaison Person (DLP) is trained and appointed, normally the facility manager. The role of the DLP is outlined in Children First: National Guidelines for the Protection and Welfare of Children (2017). The DLP is responsible for reporting allegations, concerns and disclosures of abuse and will act as a resource person for other members of staff who may have child safeguarding concerns. The DLP must be trained by a recognised safeguarding training agency to the level required. See Appendix 1

Additional training for DLPs should include:

- Understanding specific staff and volunteer roles in recognising and reporting child protection and welfare concerns under Children First: National Guidance and the Children First Act 2015.
- Knowledge of the facility's safeguarding policies and procedures for the safeguarding and welfare of children.
- Understanding of staff members' roles and responsibilities as mandated persons (if relevant).
- Understanding of staff members' roles and responsibilities as designated liaison persons.
- Knowledge of the organisation's procedure when reporting child safeguarding concerns.
- Knowledge of the organisation's policies and procedures for recording-keeping.
- Knowledge of the standards of behaviour required under the organisation's code of behaviour.
- Knowledge of the standards the inspecting bodies require of the service in regard to the safeguarding and welfare of children (if required) e.g. if the facility is affiliated to or member of any governing body/authority.

8.8.1 Deputy Designated Liaison Person

A Deputy DLP(s) should be appointed and trained to ensure that there is an appropriately trained staff member on hand at all times in the event that there is a safeguarding concern or immediate action is required.

8.9 Child Admission Policy

The aim of a Child Admission policy is to protect those who, historically, are most at risk of drowning in swimming pools. This policy should be implemented in partnership with parents and it should ensure the ongoing enjoyment of children while using the facility. It should balance the level of risk for children using swimming pools and the benefits to be gained by such use.

Lifeguards cannot and should not be expected to replace the care and supervision of a parent. Lifeguards should, however, be trained to identify when adult/child ratios in the water may be a cause for concern and the appropriate follow up, as defined in the facility's NOP.

8.10 Minimum recommendations for Non-Programmed Activities

The following is a suggested minimum set of entry requirements for non-programmed activities.

- Children aged 0-6 must be accompanied by a responsible adult in the pool.
- Children aged 7-10 must be accompanied by a responsible adult who must remain in view of the child in the pool.
- Children aged 11 and upwards may be unaccompanied.

In addition to this ILSE has determined the following regarding the use of swimming pools by minors.

8.10.1 Children under 6 years

- Parent or guardian should always participate in the water with the child.
- Exception taken to regulated swim courses with trained teachers etc. Parent or guardian should always keep the infant or toddler within arms-length.
- Provision of cordoned of areas.
- Familiarise children with the water.
- Parent and guardians should learn resuscitation and self-water rescue skills.

[2] *Quan L, Cummings P*
Characteristics of drowning by different age groups
Injury Prevention 2003;9:163-168.

8.10.2 Children 7-12 years

- Parent or guardian should always participate in the water if the child is unable to swim according to the swimming definition. Exception taken to regulated swim courses with trained teachers etc.
- Learn resuscitation (Resuscitate a friend).
- Learn to swim and survive.

Awareness programs.

Junior Lifesaver clubs.

8.11 Weak swimmers

ILSE recommends that the following consideration should be given to weak swimmers:

- Close surveillance.
- Inform them of a safe way to use the facility and recommend shallow water, not deeper than 1.35m.
- Inform them of what to do in case of panic.
- Inform members of swimming schools, adult as well as children.

8.12 Age Considerations for Programmed Activities

It is impossible to arrive at a finite set of guidelines, which cover the many types of swimming facilities now being built. It is also impossible to account for the varying aquatic abilities, physical and psychological development found in children of similar ages. However age and parental permission must always be considered, depending upon the nature of the activity. The following will assist facility operators to look at the factors, which will help to control risks. They will also provide guidance in arriving at practical and positive policies for child safety.

8.13 Risk Assessment & Child Admission Policies

A full risk assessment will be required before a Child Admission Policy for a facility is produced. This will have to consider factors such as pool design and layout; general staffing levels and their experience; the swimming ability and maturity of the children and whether, buoyancy aids are being used by nonswimmers. The presence of pool features such as slides, waves will also have to be considered.

The above factors, when considered in the light of the risk assessment findings, will help pool operators determine the appropriate child/adult ratios. As with all risk assessments regular reviews must be undertaken regularly.

For the purposes of these guidelines the health and safety of children must be paramount to all pool procedures and rules.

Some general guidelines are as follows:

- All children, as defined for the purposes of these guidelines, should be under constant staff or parental supervision within the facility.
- Operators may outline specific rules for younger children and those children with disability.

For example, a child under 7 policy, should be enforced during open leisure swimming times. This should state that children under seven only enter the pool under the parents' supervision. The minder must supervise the child from a safe distance i.e. be able to maintain visual contact with the child at all times. This policy may not apply during structured swimming sessions e.g. swim lessons or school programs.

8.14 Buoyancy Aids used by Children

Buoyancy aids should carry an approved standards emblem. Operators should advise customers of this fact where appropriate.

Minimum Criteria for Designated Non-Swimmer Areas

- Suitable and sufficient area of shallow water.
- Restricted access to deep water.
- Clear line if view for the supervising lifeguard.
- No water features e.g. Flumes.
- No steep gradients.

In programmed activities: The aquatic skills and safety awareness of children should be tested and certified by a re

Any changes to the facility's recommended ratios should be explained and justified in the pool's written operating procedures.

8.15 Children's use of Changing Rooms

Problems sometimes arise for other users, when a child of the opposite sex has to share the dressing room with the person minding them. This is best eliminated by the provision of family or group changing rooms.

Other guidelines in this respect are as follows:

All swimming facilities should have safeguarding policies and procedures in place to ensure children are protected from the risk of harm of abuse whilst using changing facilities. All staff are required to be able to recognise, respond to and, if necessary, report their safeguarding concerns, observations, or disclosures the Designated Liaison Person, or the Deputy Designated Liaison Person.

The overwhelming consideration in all circumstances has to be the safety of the child.

The Child Admissions Policy shall be implemented upon completion of a thorough risk assessment and after consultation with users. It should then be displayed at the main points of public access to the facility.

The admission policy should cater separately for specific groups of children, such as schools, children's parties, club groups. Particular consideration should be given to meeting the needs of children with

disabilities and their carers. Factors, which might be altered for such groups are as follows:

- Ratio of children to carer.
- Numbers of lifeguards on duty.
- Limiting use of the pool to designated areas.
- Age requirements may also be altered.

A thorough Risk Assessment will indicate specific requirements and highlight any alterations, which might be made for the different category of user.

9 Responsibilities of Pool Operators

9.1 Introduction

Pool operators have the responsibility for the overall operation of the facility. This includes the safe operation of the pool environment so that that users may have a safe swimming experience when they visit the swimming pool.

They are also responsibility for the safety and welfare of the pool users and their employees. They have a greater responsibility for the safety and wellbeing of all minors who make use of their pool.

9.2 Legislation and the Pool Operator

Pool Operators have responsibilities under many pieces of legislation and regulations. Some of these are:

- Children's First Act (2015).
- Occupiers' Liability Act (1995).
- Safety Health & Welfare at Work Act (2005) and The General Regulations 2007.
- Chemicals Act 2008.
- Chemicals (Amendment) Act 2010.
- Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation.
- Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation.
- Disability Act 2005, for pool operators which are public bodies, such as local authorities.
- The Equal Status Acts 2000-2015.

This list focuses on the health and safety responsibilities of the pool operator. Most have been discussed above and will not be reviewed again. In general, pool operators, have a responsibility to ensure the above regulations are in place. Pool operators have a duty of care responsibility for all who enter their premises as well as to staff. Not all of these responsibilities are within the competence of this document.

9.2 Staff Competence

The pool operator has a responsibility to ensure that his/her staff are competent to perform their roles and continue to be competent on an on-going basis. In the case of pool lifeguards this means that on-going training as part of a CPD programme is recommended. The principle responsibilities are to ensure that there is a written organisational training policy in place with an associated budget. This policy shall outline provisions for staff time used for training and who will present the various types of training. Water Safety Ireland's Continuing Professional Development for Lifeguards document recommends the following:

- A minimum of twelve hours per year should be devoted to CPD for facility staff. It should cover the following topics
- Knowledge of the facility's NOP and EAP. The practice of E.A.P s should receive most of the attention.
- The practice of Basic Life Support.
- Customer Care issues.
- Swimming Fitness.

9.4 Other Areas of Responsibility

There are other areas that a pool operator must ensure. These include the following:

- There is a specific, staff induction plan for new employees. This must include health, safety and customer service.
- The staff are properly supervised.
- Employees are appropriately qualified for their specific roles.
- There is a current Health and Safety statement for the facility.
- Carry out risk assessments on a regular basis with written reports available as evidence. These reports shall outline all actions taken in response.
- The facility has an up to date NOP.
- Outline E.A.P.s for identifiable incidents.

Lifeguards attending refresher training

10 Appendices

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10.1 Appendix 1 – Child Safeguarding

1. Tulsa Guidance and policies. can be found at https://www.tusla.ie/children-first/organisations/advice-information-and-training-for-staff-and-volunteers-of-organisations/
2. A template for a Child Safeguarding risk assessment can be found at https://www.hse.ie/eng/services/list/2/primarycare/childrenfirst/child-safeguarding-statement/guidance-forhse-child-safeguarding-statements-and-risk-assessment-workbook.pdf. This template is designed for HSE units and terms but provides an excellent base for all facilities

The following organisations can provide additional training and assistance in the area of child safeguarding.

Tulsa - www.tusla.ie - Key resource for Child Safeguarding knowledge and awareness

Ireland Active – www.irelandactive.ie - Representative body for Leisure Industry in Ireland

Sport Ireland - www.sportireland.ie - Statutory Authority tasked with the development of sport.

Water Safety Ireland – www.wsi.ie – Statutory Authority tasked with Water Safety awareness and training.

Swim Ireland - www.swimireland.ie – Swim Ireland is the National Governing Body for Swimming, Diving and Water Polo in Ireland

10.2 Appendix 3 - ILSE Pool Supervision Ratios

International Life Saving Federation of Europe

Pool Safety Guidelines

Version 2.0 January 2017

Staffing

When the public has access to the site and also when swimming lessons are in progress, the site shall be managed by at least one lifeguard. The lifeguard should wear special clothing so that visitors easily can recognize them in case of emergency.

The table below shows the minimum recommended numbers of lifeguards. These recommendations cannot be isolated, they must be put together with the results from the Risk Assessment.

Pool Area m2	Min.No	Min. No Busy periods
0-170	1	2
212	1	2
250	1	2
312	2	2
416	2	3
625	2	4
1250	4	6

NOTE!

If continuous supervision of swimmers is not in place, the reason for this must be motivated with support from the RA. In these circumstances user about to visit the site, prior to admission, must be informed that continuous supervision in the pool area are not in place.

10.3 Appendix 2 - Pool Design Considerations

It is at the design stage that one has an opportunity to minimize potential risks. The following are a number of guidelines, which should be considered at the design stage for a modern pool facility:

- The possibility of persons gaining unofficial access to a premises should receive priority attention, because of the extra dangers associated with swimming pools. This should receive a higher priority in the case of outdoor pools. The height of surrounding walls or railings should be adequate where the latter type of pool facility is concerned.
- Pool covers should not be considered safety features unless they are installed in such a way that no one can get underneath the cover.
- Access on to the poolside should be nearer the shallow end and include a barrier between pool entrance and pool edge.
- Always avoid entries at or near the deep end. Where this is unavoidable, a warning notice and/or a guard rail should be provided. Entries at or near the deep end should be avoided. Where this does occur, a warning notice and/or a guard rail must be provided.
- The pool floor gradient should also receive attention. Sudden drops and/or steep inclines can present dangers for users. A slip resistant and non-abrasive finish should be provided on the end walls of the pool.
- Changes in depths should be clearly identified by the use of colour contrasted materials e.g. tiles or patterned finishes. The colours used should not reduce the ability to see a body on the pool bottom
- Pool tank edge should be colour contrasted with the pool water to ensure it is visible to those in and out of the water.
- All pools should be designed with adequate storage space to ensure equipment etc, not in use, can be kept in a safe place. This will ensure that pool equipment will not become obstacles in and around the pool area or used without proper supervision.
- Pool floors and the surrounds should be constructed of non-slip materials with appropriate signs in place to discourage running.
- Steps/Ladders should be provided at the deep and shallow ends of the pool to ensure safe entry and exit. These can be permanent or removable. Attention to their design and location, to ensure they are safe, accessible and do not present an obstacle to safe supervision by the lifeguards. They should be fitted with handrails on both sides and these should protrude 750-950 mm above the pool surface. Steps should be flat and not tubular.
- Steps, handrails, and ladders must be of sufficient strength and be firmly fixed to the poolside and should have treads, which are slip resistant and have no sharp edges.
- Where it is intended to offer diving as an activity or as part of an activity, particular attention must be paid to water depth, height of the diving platform and forward clearance.
- Lighting should ensure that the bottom of the pool is clearly visible and that all signs can always be seen and read.
- Underwater lighting will help decrease the surface glare effects of other facility roof lights.
- Emergency lighting should be provided and regularly checked. A lighting failure can lead to panic. Emergency power back up should be available.

- Emergency exits from the poolside must be included in all pool designs.
- Where activities of a robust nature, e.g. water or canoe polo, may be permitted in the swimming pool, all lights should be protected against breakages.
- Where features, such as wave machines/ slides, are being included in the design, the inclusion of built in recessed areas must be considered. While handrails and ropes are standard features included to assist bathers in and out of the water, they may become hazards in situations where bathers could become entrapped or thrown against them.
- Emergency stop buttons located near or on the poolside will have a positive effect on general safety, where other features are to be included.
- All outlets/ inlets should be fitted with grills, which will not interfere with their efficient operation, but which will prevent the entrapment of fingers, arms etc. Such grids should only be removable mechanically and should remain always tightly secured. Overflow channel grids must of course be easily detachable for regular cleaning purposes.
- Anti-vortex covers should be fitted where possible or pressure sensitive relief valves.
- Where possible the amount of glare caused by the glazing should be minimised, as this may affect the view of lifeguards and other users.
- A specifically defined First Aid Station should be designated. Full visibility of the pool from such a station is also desirable.
- A separate plant room should be included in all facilities to house and store the chemicals required by all swimming pools. Adequate ventilation should be provided in this room. Legal requirements regarding the need for correct labelling must be followed.

Access for all people, regardless of age, size, ability or disability should be included in all pool design. The following provisions will enhance the accessibility of swimming pool and associated spa facilities for a range of users' ability:

- Contrasting ramp or easy steps with contrasting nosing and suitably designed contrasting handrails to access all pools.
- Hoist provision to access all pools.
- Self-propelled waterproof poolside chairs, for use between changing areas and pool/ spa facilities.
- Self-propelled waterproof poolside chairs for use in wet areas e.g. this provision enables use in pool showers, at poolside and access/transfer within spa facilities.
- Contrasting clothes/towel hooks at 1050 mm and 1400 mm above floor level.
- Contrasting nosing to flumes, and contrasting handrails where possible.
- Accessible controls within changing facilities and clear instructional signage.
- All ramps should have a slip resistant surface and handrails on both sides
- Operators must undertake regular checks for corrosion.

It is required that at least one member of staff is qualified as a Pool Plant Operator. They will have the responsibility for all necessary chemical adjustments. Room space is recommended to be made available within the facility for on-going staff training.

10.4 Appendix 4 – References

Dr L Quan, P Cummings Injury Prevention 2003;9:163–168, Characteristics of drowning by different age groups

Chartered Institute for Sport & Physical Activity (formerly ISRM) June 1996 Safe. Supervision for Teaching and Coaching Swimming,).

Swimming Teachers' Association 2019 Pool Plant Manual

Water Safety Ireland & Ireland Active (formerly ILAM) 2005 Pool Lifeguard Manual.

International Life Saving Europe. 2005 European Basic Guidance in Swimming Pools.

Code of Ethics and Good Practice for Children's Sport", The Irish Sports Council. 2006

Government of Ireland 2015 National Children First Health and Safety Authority 2006 Risk Assessments and Safety Statements

Irish Sports Council and ERSI 2008 An analysis of a lifetime in Irish sport

Irish Sports Council 2007 The Irish Sports Monitor

Government of Ireland Be Well: 2019 National Physical Activity Guidelines

National Disability Authority 2006 Code of Practice on Accessibility of Public Services and Information and Information provided by Public Bodies

National Disability Authority 2020 Customer Communications Toolkit for the Public Services – A Universal Design Approach

Health & Safety Executive 2019 Health and Safety in Swimming Pools

Water Safety Ireland Patrick Keegan 2018 A Report on drowning in the Republic of Ireland 1988 – 2012

The Chartered Institute for the Management of Sport and Physical Activity 2016

Safe Supervision of Programmed Swimming Lessons and Training Sessions

World Health Organisation 2006 Guidelines for safe recreational water

Environments: Volume 2 Swimming Pools & Similar Environments

American Red Cross 2012 Lifeguarding Manual

European Centre for Standardisation 2008 Swimming pools - Part 1: Safety requirements for design

European Centre for Standardisation 2008 Swimming pools - Part 2: Safety requirements for operation

Sport England 2012 Accessible Sports Facilities: Use with the Accessible Sports Facilities Design Guidance Note

Federation Internationale de Natation 2017 FINA Facilities Rules 2017– 2021

Charter Institute of Sport & Physical Activity 2005 Safe Operating

10.5 Useful Contacts

Water Safety Ireland
The Long Walk, Galway
Tel: 091 564400
Email: info@watersafety.ie
Web: www.watersafety.ie

Ireland Active
Irish Sport HQ, National Sports Campus,
Blanchardstown, Dublin 15, Ireland.
Tel: 01 6251192
Email: info@irelandactive.ie
Web: www.irelandactive.ie

Swim Ireland
Irish Sport HQ, National Sports Campus,
Blanchardstown, Dublin 15.
Tel: +353 1 625 1120.
Email: admin@swimireland.ie
Web: www.swimireland.ie

HSA
Health and Safety Authority, 10 Hogan Place,
Dublin 2
Tel: 1890 289389, Fax: 01 614 7020
Email: info@hsa.ie
Web: www.hsa.ie

IDS
Irish Deaf Society,
Deaf Village Ireland,
Ratoath Road, Cabra, Dublin 7.
Text: +353 (86) 380 7033
Skype: irishdeafsociety
Email: info@irishdeafsociety.ie
Tel: +353 (01) 860 1878
Web: www.irishdeafsociety.ie/contact

NCBI
National Council for the Blind of Ireland
Whitworth Road, Drumcondra, Dublin 9.
Tel: 1850 334353
Fax: 01 830 7787.
Email: info@ncbi.ie
Web: www.ncbi.ie

National Disability Authority
Address: 25 Clyde Road
Dublin
D04 E409
Ireland
Tel: +353+(0)1 6080400
Fax: +353+(0)1 6609935
Web: http: www.nda.ie
Email: nda@nda.ie

PWTAG
Pool Water Treatment Advisory Group, PWTAG
Technical Secretary, Field House
Thrandeston, Diss,
Norfolk
IP21 4BU
UK
Tel: 0044 (0)1379 783678
Fax: 0044 (0)1379 783865
Email: Guthrie@pwtag.org
Web: www.pwtag.org

HSE
Health & Safety Executive Information
Services
Caerphilly Business Park
Caerphill
CF83 3GG
England.
Tel: 0044 (0)8701 545500
Fax: 0044 (0)2920 859260
Email: hseinformationservices@natbrit.com
Web: www.hse.gov.uk

STA
Swimming Teachers' Association
Anchor House
Birch Street
Walsall
WS2 8HZ
United Kingdom
Tel: 0044 (0)192645097
Email: sta@sta.co.uk
Web: www.sta.co.uk

Notes

Notes

NO DIVING
1.2 METRES

Rialtas na hÉireann
Government of Ireland