

Health & Safety Guidance

Diving into Swimming Pools – the issues facing Swimming Clubs and Swim Schools

Diving into swimming pools continues to be a controversial issue for both swimming clubs and swimming pool managers. The guidance documents relating to this activity are summarised below together with useful pointers on how to resolve issues.

The hazards associated with diving are death, paraplegia, tetraplegia and concussion so the outcomes of a poorly managed diving protocol in a swimming pool is severe.

The guidance documents, which apply to diving in general that is from in the pool, from the poolside, from starting blocks and from springboards and platforms are:

At a national level:

- ❖ “Managing health and safety in swimming pools”, first published in 1988 by the HSE and Sport England.
- ❖ “Diving & Jumping in Swimming Pools and Open Water Areas”, published by the Chartered Institute for the Management of Sport and Physical Activity”
- ❖ The “FINA Handbook” revised every four years
- ❖ The Swim England/ASA Handbook, revised annually
- ❖ The Swim England National Plan for the Teaching of Swimming
- ❖ Guidance notes for teachers and coaches on the standards for achieving a Swim England Diving related certificate

And at local level:

- ❖ Any risk assessments applicable to a specific swimming pool, and
- ❖ The “Pool Safety Operating Procedures” that are produced for specific swimming pools as a result of the above risk assessments.

Let us examine national guidelines first:

Managing health and safety in swimming pools

This is the swimming pool manager’s bible in health and safety terms and covers issues relating to the physical facilities and their management.

This document deals with diving in a general way and mostly with regard to un-programmed swimming or general public use. Obviously it emphasises the need to risk assess diving in all pools and to display the appropriate signage prohibiting diving in water of insufficient depth.

The guidelines in relation to the design of diving facilities went some way to contribute to the removal of hundreds of diving platforms and springboards throughout England, as they did not conform to basic design requirements viz:

- As a general principle, when new pools are being designed, diving stages and springboards should only be installed over a separate purpose-designed pool. Obviously this was to reduce the risk of collision between swimmers and divers.
- Facilities for competitive diving should comply with the dimensional standards produced by FINA and it was stated that these standards were also adequate for recreational diving.
- There should be a surface spray or bubble plume to break the surface of the water for better visibility under diving boards.
- With regards to starting platforms it stated that platforms preferably should be located at the deeper end of the pool and that they should not be available for use by casual bathers in un-programmed sessions.
- It also advocated raised ends for deck level pools that are used primarily for training so that starting platforms can be fixed.

The provision of a dedicated diving pit is an expensive option, which over the years has discouraged local authority municipal pool providers from investing in diving facilities. However the introduction of moveable floors has enabled innovative design whereby a diving pit can double as a learner pool and everything in between allowing multi-use and higher revenue earning capability. This document therefore has some health and safety recommendations relating to diving pits with moveable floor:

- Electrically-operated 'no diving' signs should be provided in the statutory format which should be clearly visible whenever the floor is in its swimming modes and a manual back up should also be available.
- Diving facilities should not be accessible to bathers unless the floor is at its full diving depth and depth signs appropriate to the operational depth are necessary.

Diving and Jumping in Swimming Pools and Open Water Areas

As its name suggests this document is much more detailed than "Managing health and safety in swimming pools", and covers all aspects of diving and jumping into pools. Although it stresses the need to risk assess the diving facility it does provide a number a recommendations, which have been adopted by the industry, and the relevant points are summarised here:

The document makes the distinction between programmed (swimming lessons and swimming club sessions) and un-programmed sessions (public swimming, pool parties etc.)

Recreational and un-programmed swimming

- Only flat racing dives should be permitted into swimming pools. Steeper entry dives should only take place into diving pools designed to FINA standards.
- Diving should not be permitted into water with a vertical depth of less than 1.5-metres in un-programmed sessions.
- Diving and jumping should not be permitted from pool sides with freeboards exceeding 0.38-metres.
- Diving should not be allowed in pools where there is a forward clearance of less than 7.6-metres
- No running dives permitted.
- "No Diving" prohibition notices conforming to the Safety Sign Regulations should be displayed where it is considered unsafe to dive from the poolside
- Jumping from a stationery position into water with a depth of 0.9-metres or more may be permitted for small children.
- However a risk assessment should be undertaken before permitting jumping to take place in water of less than 1.5-metres.

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

- No running jumps

Teaching diving and feet first entries from the poolside – programmed swimming

- Flat racing dives only.
- The teaching of diving should not be undertaken in water less than 1.8-metres deep.
- Diving and jumping should not be permitted from the poolside where the freeboard exceeds 0.38-metres unless FINA pool depths apply for the appropriate platform height and water depth.
- The clearance forward may vary depending on the height and ability of the person undergoing instruction. Clearly small children do not need anything like 7.6-metres when undertaking their first diving tuition. Most dives taught off boards require a vertical entry with little forward momentum.
- Where jumping is concerned those at the early stages, normally between the ages of 4 and 8 should only be taught to jump in 1-metre minimum depth. Those who are more confident in deeper water up to 1.5-metres and normally between 8 and 12 years old or adults should be taught to jump in water of at least chest depth.
- Confident swimmers should be taught to jump in water of 1.5-metres or more.

Diving stages and boards- programmed swimming

- Diving from boards and springboards should comply with FINA Standards.
- Diving areas should be segregated from swimming areas.
- Notices on the dangers of diving and jumping from boards; who should use the boards and their method of use must be clearly displayed.

Starting platforms and competitive swimming and programmed swimming starts

This is all about achieving consistency to minimise risk and relates to the Swim England/ASA Competitive Start Awards referred to later. These sections however do stress that races **should not**, as a matter of course, start from the shallow end of a pool.

- If there is any doubt of the competence of competitors to perform a competitive dive in a water depth of a minimum of 0.9-metres then they should ensure the competence level by requiring a flat racing dive to be performed in 1.5-metres depth.
- Starting blocks should comply with FINA Standards.
- Use of starting platforms should be restricted to swimmers skilled in performing flat racing dives.
- Where starting platforms are provided the water depth for a distance of 1.0-metre to 6.0-metres from the starting end wall should be at least 1.35-metres deep.
- Starting platforms fitted at the shallow end where the water depth is less than 1.8-metres should have a notice attached stating “DANGER SHALLOW WATER BELOW”
- The conditions of the Swim England/ASA Safety Laws – Swimming Officials Prompt Card – Announcer should be enforced.

The FINA Handbook

In the section on swimming the handbook does not attempt to define the term ‘dive’ and merely comments that the start of the Freestyle, Breaststroke, Butterfly and Individual Medley races shall be with a dive from a starting platform.

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

As detailed above “Diving & Jumping in Swimming Pools and Open Water Areas” refers to a ‘flat racing dive’ and the question has to be asked whether this term is appropriate to the modern competitive start techniques. Clearly the steeper the angle of entry into the water the deeper the resultant dive depth.

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 Swim England/ASA Handbook

Under the heading Technical Rules of Racing the Swim England/ASA generally refer to the FINA Swimming Rules above. However there is one notable addition and that is the Swim England/ASA Safety Laws – Swimming Officials Prompt Card – Announcer.

The main purpose of this prompt card announcement is to ensure that competition swimmers know the water depth beneath and in front of the starting platforms and the height of the starting blocks above the water. The caveat is that where the water depth is 0.9-metres but less than 1.5-metres coaches and team managers are reminded that only those swimmers who have reached the standard of the Swim England/ASA Preliminary Competitive Start Award are permitted to start with a shallow racing dive from the side of the pool and those swimmers who have reached the standard of the ASA Competitive Start Award are permitted to start with a shallow racing dive from a starting platform.

The implication of this announcement is that by enrolling a competitor in an event where shallow water diving is required there is a tacit declaration by the coach or team manager that the swimmer is competent to the appropriate Competitive Start Award. The onus and duty of care is clearly with the coach or team manager.

There is no requirement for the swimmer to have the appropriate Competitive Start Award only to be competent to the standard. The competency is proven by the coach or team manager and clearly if proof was demanded it could only be offered by way of (a) producing the achieved award certificate, (b) producing records of training, and (c) the verbal and/or written affirmation of the coach. Coaches need to ask themselves if they could meet this burden of proof if challenged in court.

The implication from all this is that swimmers entering competitive events should have already undertaken training in shallow racing dives from a competent teacher and has achieved a safe level of performance both in deep and shallow water.

The ASA National Plan for the Teaching of Swimming

Any form of lesson planning must consider health and safety issues and have the appropriate aquatic environment to undertake the various exercises required.

The Swim England National Plan for the Teaching of Swimming does not require any diving to be undertaken in a water depth less than those specified in the previously discussed documents.

However teaching diving techniques starts in the water, not on the side and it follows that the depth of the water must be commensurate with the exercise being taught, and the size, age and ability of the swimmer. The same applies when teaching diving from the side to very young children where they are performing a dive from a kneeling, or crouching position. A risk assessment is required to determine relevant depths for these activities and this should be in the swimming pools Pool Safe Operating Procedures. It follows that at a young age children performing sitting and kneeling dives from the poolside do not require the same depth and forward clearance tolerances as identified in Diving & Jumping in Swimming Pools and Open Water Areas

Guidance notes for teachers and coaches on the standards for achieving a Swim England/ASA Diving related certificate

The guidance in the previous paragraph applies but of particular interest here is the requirements to achieve the Competitive Start Awards, which are reproduced here:

The Swim England/ASA Competitive Start Awards are endorsed by CIMSPA, RoSPA and RLSS UK and other bodies who believe that swimmers should demonstrate shallow racing dive competencies before being permitted to dive into shallow water (i.e. water depth range 0.9 up to 1.5 metres from the side or from a FINA standard starting platform).

The Swim England/ASA guidance is that such competence should be demonstrated by achieving the standard of the Swim England/ASA Competitive Start Awards. These standards are a requirement for competitions under Swim England/ASA Law.

The Swim England/ASA Preliminary Competitive Start Award is designed to assess:

- The swimmer's ability to perform a safe racing dive into deep water from the side of the pool
- The swimmer's ability to perform a safe racing dive from a starting block
- The swimmer's ability to perform a safe racing dive into shallow water from the side of the pool

Preliminary Competitive Start Award

From the Poolside at the Deep End of the Pool
(Minimum water depth 1.5-metres, maximum freeboard 0.38-metres)

Under normal starting conditions: -

1. perform a shallow dive followed by a glide of at least 5-metres
2. perform a shallow dive followed by a front crawl leg kick to the surface
3. perform a shallow dive followed by a Dolphin leg kick to the surface
4. perform a shallow dive followed by a breaststroke arm pull and leg kick to the surface
5. perform a back crawl start using the side/rail followed by a back crawl kick to the surface

From a Starting Block at the deep End of the Pool
(Minimum water depth 1.5-metres, recommended height of starting block from the water 0.5-metres, maximum height of the starting block from the water 0.75-metres)

6. perform a shallow dive followed by a glide of 5-metres
7. perform a grab start followed by a front crawl leg kick to the surface
8. perform a grab start followed by a Dolphin leg kick to the surface

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

9. perform a grab start followed by a breaststroke arm pull and leg kick to the surface
10. perform a wind up start for a stroke decided by the examiner
11. perform a back crawl start using the starting block followed by a back crawl kick to the surface

WARNING: The swimmer must not be permitted to undertake the remaining sections of this award until the preceding skills have been successfully accomplished.

From the Poolside at the Shallow End of the Pool

(minimum water depth 0.9m, maximum water depth 1.0-metres, maximum freeboard 0.38-metres)

Under normal starting conditions:-

12. perform a shallow water dive followed by a glide of at least 5m decided by the examiner
13. perform a grab start followed by a front crawl leg kick to the surface
14. perform a grab start followed by a Dolphin leg kick to the surface
15. perform a grab start followed by a Breaststroke arm pull and leg kick to the surface
16. perform a wind up start for a stroke decided by the examiner
17. perform a back crawl start using the side/rail followed by a back crawl kick to the surface

The Swim England/ASA Competitive Start Award is designed to assess:

- ❖ the swimmer's ability to perform a safe racing start into shallow water from a starting block and to demonstrate a variety of techniques

Competitive Start Award

From the Poolside at the Shallow End of the Pool

(minimum water depth 0.9-metres, maximum water depth 1.0-metres, maximum freeboard 0.38-metres)

Under normal starting conditions:-

1. perform a track start followed by a glide of at least 5m
2. perform a back crawl start followed by a Dolphin leg kick to the surface

From a starting block at the Shallow End of the Pool

(minimum depth 0.9-metres, maximum depth 1.0-metres, recommended height of the starting block from the water 0.5-metres, maximum height of the starting block from the water when the water depth is between 0.9-metres (minimum) and 1.35-metres is 0.5-metres, maximum height of the starting block when the water depth is 1.35-metres or above is 0.75-metres)

3. perform a shallow dive followed by a glide of at least 5-metres
4. perform a wind up start with a glide of at least 5-metres
5. perform a grab start with a glide of at least 5-metres
6. perform a track start with a glide of at least 5-metres
7. perform a back crawl start using a starting block followed by a Dolphin leg kick to the surface
8. perform a minimum of three starts, under normal starting conditions, as decided by the examiner, showing the appropriate transition into the swimming stroke. One of the starts included must be for the breaststroke.

IMPORTANT NOTES

- Teachers and coaches must stress the inherent dangers of diving to all swimmers
- The plunge dive into deep water and those skills contained in the Swim England/ASA Diving Award Level 1,

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

Poolside Diver Grades 1 and 2 Awards **must** be mastered before the Preliminary Competitive Start Award is introduced

- The Swim England/ASA Laws relating to starting procedures must be fully explained to all pupils these Awards may be taken over a number of sessions, but must follow the order as outlined
- The standard of the Preliminary Competitive Start Award must be reached before attempting the Competitive Start Award
- The minimum qualification for the teaching and examining of these awards is the Swim England/ASA Teacher Certificate and it is essential that all teachers/coaches and examiners are fully conversant with the notes provided

This clearly demonstrates how many times a swimmer has to demonstrate a competency and at what water depths to achieve the awards. It clearly indicates that the initial training is undertaken at the deep end of the swimming pool but that the final testing must be undertaken at a water depth between 0.9-metres and 1.0-metre.

In addition to the competitive start award the ASA Awards test conditions provide descriptors for poolside diving where it is stressed that dives should be shallow entry. All certificates reiterate that jumps must be done into water of at least full stretch height (or 1.8-metres).

All of the Swim England/ASA Diving Award Scheme awards require pool water depths in line with "Diving & Jumping in Swimming Pools and Open Water Areas", as outlined above.

There is anecdotal evidence to suggest many swimming clubs have difficulty in gaining permission from their pool operators in completing the awards because diving is completely prohibited from the shallow end for both non-programmed and programmed activity!

This problem is followed neatly by examining the issues at local level

Any risk assessments applicable to a specific swimming pool

It is a requirement under the Management of Health and Safety Regulations 1999 for every swimming pool to undertake a written risk assessment identifying hazards, quantifying their risk and managing the safety process. Although the number and frequency of diving accidents are statistically extremely low the resultant seriousness of the potential injuries requires that diving into swimming pools has to be addressed and managed with caution.

Most pool operators will adopt the guidelines outlined above and in particular those recommendations in *Diving & Jumping in Swimming Pools and Open Water Areas* and build them into their Pool Safe Operating Procedures.

Pool Safe Operating Procedures (PSOP)

Again the Management of Health and Safety Regulations 1999 requires that organisations compile suitable operating procedures incorporating appropriate emergency action plans.

Despite having copious national guidelines individual swimming pool operators are at liberty within the framework of their risk assessment conclusions to completely ignore them and introduce their own rules. They may have good reason to do so given the unique configuration of their particular pool? The PSOP as it is referred to in swimming pools will inevitably be determined by the swimming pool manager's attitude towards risk and diving and rules applied at one pool may be totally different to those applied at another pool.

It is not unusual for a manager to adopt a 'no diving' policy in a small 25m x 4 lane pool with a depth from 0.9-metre to 1.8-metres or 2-metres. With a 2-metres depth this is done because there

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

is so little of the deep end of the pool that can safely be used for diving and it is easier to introduce a blanket prohibition, and of course *Diving & Jumping in Swimming Pools and Open Water Areas* prohibits the teaching of diving in less than 1.8-metres water.

Most swimming pools will have some part of the shallow pool area marked off as 'no diving'.

It is often difficult for pool management and staff to be flexible and understand there is a difference between un-programmed swimming and programmed training; so they extend the no diving policy to club training sessions and inhibit the required development of competitive diving.

At the very least competitive diving should be permitted at the deeper end of the pool assuming it is not a shallow depth throughout facility.

Dlfw/SwimEngland/Facilities/28.06.2017

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.

Readers are advised that the guidance or advice given in this information sheet is not inclusive and any decisions on swimming pool design should first be discussed with a member of the Swim England's Facilities Team. Contact details: facilities@swimming.org or telephone: 01509 618700.