Diving Depths

Whilst not wanting to stir up the debate over the issue of what should be the minimum depth of water for safe diving, the issue continues to arise regularly and questions continue to be asked.

Disclaimer:
ASCTA do not provide advice or offer accreditation for any high diving platforms or activities. Unless otherwise specifically stated in writing the industry insurers, Marsh does not offer coverage for high diving platforms or activities unless specifically noted in writing in the policy document. This discussion relates to entries from the pool edge or starting platforms only.

Facts:
FINA (www.fina.org) states the following in relation to depths for pools used for competition:

- **FR 2.3 Depth** - A minimum depth of 1.35 metres, extending from 1.0 metre to at least 6.0 metres from the end wall is required for pools with starting blocks. A minimum depth of 1.0 metre is required else where.

- **FR 2.7 Starting Platforms**. The height of the platform above the water surface shall be from 0.5 metre to 0.75 metre. The water depth from a distance of 1.0 metre to 6.0 metres from the end wall must be at least 1.35 metres where starting platforms are installed.

FINA also requires the following for Olympic Games and World Championships:

- **FR 3.3 Depth**: 2. Metres (minimum); 3 metres recommended.

- **FR 3.9 Starting Platforms**: as in FR 2.7.

Swimming Australia (www.swimming.org.au) (SAL) has a set of facility rules with the following disclaimer: “The Facilities Rules are intended to provide the best possible environment for competitive use and training. These Rules are not intended to govern issues related to the general public. It is the responsibility of the owner or controller of a facility to provide supervision of activities of the public.”

SAL rules related to diving depth are a mirror of FINA FR 2.3 noted above.

The September 2006 issue of ‘Swimming in Australia’ magazine introduced strategies for teaching a safe and effective dive entry into the pool. In addition, to understanding teaching strategies, all coaches (and ergo Teachers- Ed) should be aware of Swimming Australia Ltd.’s “Safe Pool Depth for Diving” policy. This policy has been adapted from current Royal Life Saving Society Guidelines for Safe Pool Operations (GSPO) on depth as they apply to all competitive swimmers.
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In summary the policy restricts diving under these pool conditions:

i. Less than 0.9 metre water depth – absolutely NO dive entry;
ii. 0.9 metre to less than 1.0 metre water depth – concourse dive allowed;
   providing concourse is not elevated more than 0.2 metre above the water surface;
iii. 1.0 metre to less than 1.2 metre water depth – concourse or platform dive, providing concourse
    or platform is not elevated more than 0.4 metre above the water surface;
iv. 1.2 metre or more water depth – platform dive, provided the platform is not elevated more than
   0.75 metre above the water surface.

In addition, pool depth should extend for a distance of 5.0 metres from the endwall where the dive entry is
made.

In all cases, teachers and coaches should supervise all diving activities by pupils and athletes and exercise
prudent risk management strategies. It’s important to teach competitive swimmers when and where they
can safely perform a dive entry into the pool as well as monitoring their diving technique.

Royal Life Saving Society: Coaches should also note that Royal Life guidelines for ‘recreational swimmers’
(i.e. those not under the close supervision of a trained teacher or coach) allow for more generous (i.e.
deeper) pool depth tolerance when diving.

ASCTA and Royal Life (in summary of the GSPO) recommend the following when teaching diving to learners.
(Diving is defined as an entry into water where the upper body enters first i.e. the hands, arms and head are
followed by the torso and lower limbs.)

• Before teaching diving, the Teacher should be cognisant of safety issues, especially the depth of
  water where the learner will enter.
• Learners should be taught safety factors for an entry into known and unknown depths of water such
  as rivers, lakes, dams and creeks.
• Information should include –
  o the possibility that depths can change, [e.g. due to drought, tide, flooding etc];
  o to always check the depth before entry [e.g. with a stick or slide in entry];
  o to make sure the entry point is well clear of other people, lane ropes or obstructions;
  o check for depth markers or warning signs;
  o to enter, jump or dive away from the edge.
• The recommended minimum depth for diving instruction suitable for a learner is 1.5 metres.
  RLSSA states “The water depth should ideally be at least 1500mm (1.5m). However this must only
  be considered as exemplary, as some pools may not be able to provide appropriate water depths. It
  is suggested the above be used as guidance only and be followed where possible. If the preferred
  minimum water depth is not available the deepest water available should be used with the exercise
  of additional caution”.
• Prudent risk management would also suggest that with adult learners or children with a height
  greater than 1.5 metres, the minimum water depth should be at least equivalent to the learner’s
  height.
• Until a learner can successfully dive or perform a specific entry a number of times from a sitting,
squatting and standing position under the supervision of an accredited teacher or coach, they
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should not progress to diving or other entries off starting blocks. At each step in the learning sequence, Learners should make first attempts at new entry skill, one at a time under the close supervision of a Teacher.

- Diving activities should take place in an area segregated from swimming activities.
- A prudent risk assessment should be undertaken. This risk assessment should take into account factors (among others) such as the age, swimming ability and health of the participants, previous incidents, the activities to be undertaken during the training or tuition session, the layout of the pool and the facility, the location of the facility, the availability of rescue equipment, first aid facilities and trained water safety personnel. If the risk assessment indicates that a pool lifeguard, spotter or extra staff should be present, then steps should be taken to achieve this.
- Regardless of the outcome of the risk assessment, an Emergency Action Plan [EAP] should be developed so that if something unfortunately does go wrong, it can be dealt with in an effective and timely manner. The EAP should then be disseminated to all involved so that each person is aware of the role they are expected to play.

Issues related to diving by the general public in community pools is a whole other topic. The book, Div- ing Injuries: Research Findings and Recommendations for Reducing Catastrophic Injuries (Hardcover) by Milton Gabrielsen [Editor] examines 440 diving related spinal injuries and makes very interesting reading on this topic.

References:

Swimming in Australia: ASCTA September 2006
www.swimming.org.au
RLSSA Guidelines for Safe Pool Operations
  PR 9 Teaching of Water Entry and Diving
  FD 6 Swimming Lane Design
  FD24 Design of Starting Blocks (Starting Platforms)
  FD 3 Pool Depth Markings
Dive depth and Water depth in Competitive Swim Starts, J Blitvich et al, 2000
www.fina.org
Letter from RLSSA to ASCTA re squad supervision: 7 November 2008