

APPENDIX 1

Lifeguards

This appendix relates to people who are trained and positioned at swimming pools to protect water users and who may be paid or voluntary. They may be referred to as lifesavers or lifeguards or given some other title. For simplicity, the term 'lifeguard' has been used throughout this appendix. Box A.1 outlines an example of requirements of a lifeguard, while Box A.2 gives an example of a lifeguard staffing approach.

BOX A.1 EXAMPLES OF REQUIREMENTS OF THE LIFEGUARD AND THEIR DEPLOYMENT

The lifeguard will normally need to be:

- physically fit, have good vision and hearing, be mentally alert and self-disciplined;
- a strong, able and confident swimmer;
- trained and have successfully completed a course of training in the techniques and practices of supervision, rescue and first aid in accordance with a syllabus approved by a recognized training organization.

The deployment of lifeguards would normally take the following into consideration:

- duty spells and structuring of duties – maximum uninterrupted supervision period, working day, programmed breaks;
- lifeguard numbers – dependent on the pool type, size and usage;
- surveillance zones – observation and scanning requirements;
- supervision of changing facilities – showers, toilets, seating and other areas of potential hazard.

Adapted from Sport England & Health and Safety Commission, 2003

Should the pool be used by groups with their own lifeguards, it is important that the criteria that apply to the professional pool lifeguard be equally applied to the groups' lifeguards. Furthermore, there should be documentation on the roles and responsibilities of the groups' lifeguards: the hazards and the potential negative health outcomes associated with those hazards are no less when supervision and management are undertaken by volunteers.

There are a multitude of courses offered for the training and certification of lifeguards. Box A.3 provides examples of some important elements of lifeguard training. Box A.4 provides an example of an international pool lifeguard certificate.

BOX A.2 EXAMPLE OF A LIFEGUARD STAFFING APPROACH

In the United Kingdom, lifeguard numbers may be determined as shown in Table A.1 (Sport England & Health and Safety Commission, 2003).

Table A.1. Lifeguard numbers per square metre of pool

Approximate pool size (m)	Area (m ²)	Minimum number of lifeguards (normal)	Minimum number of lifeguards (busy)
20.0 × 8.5	170	1	2
25.0 × 8.5	212	1	2
25.0 × 10.0	250	1	2
25.0 × 12.5	312	2	2
33.3 × 12.5	416	2	3
50.0 × 20.0	1000	4	6

Notes:

1. Where only one lifeguard is on duty, there should be adequate means of summoning assistance rapidly.
2. The 'water area' column can be used as a guide for irregular-shaped pools.

The number of lifeguards required for safety can also be calculated based on sweep time and response time. Some lifeguard training organizations, for example, have created general rules for how quickly they believe a lifeguard should be expected to observe a person in distress within their supervision area and how quickly the lifeguard should be able to reach that person. Based on such rules, training and evaluation, appropriate staffing levels can be derived.

BOX A.3 EXAMPLES OF IMPORTANT ELEMENTS OF LIFEGUARD TRAINING

Public interactions

- Responding to inquiries
- Handling suggestions and concerns
- Addressing uncooperative patrons
- Dealing with violence
- Working with diverse cultures
- Accommodating patrons with disabilities

Responsibilities to facility operations

Preventing aquatic injury

Patron surveillance

Facility surveillance

Emergency preparation

Rescue skills

- General procedures
- Entries
- Approaching the victim
- Victims at or near the surface
- Submerged victims
- Multiple victim rescue
- Removal from the water
- Providing emergency care

First aid for injuries

First aid for sudden illnesses

Spinal injury management

- Anatomy and function of the spine
- Recognizing spinal injury
- Caring for spinal injury
- Caring for a victim in deep water
- Spinal injury on land

After an emergency – responsibilities

Adapted from American Red Cross, 1995

BOX A.4 INTERNATIONAL POOL LIFEGUARD CERTIFICATE OF THE INTERNATIONAL LIFE SAVING FEDERATION

For successful recognition for the International Pool Lifeguard Certificate, the candidate must be able to:

LEARNING OUTCOME 1: Perform water-based fitness skills in a pool environment.

Assessment Criteria:

- 1.1 Swim 50 m in less than 50 s with the head above the water.
- 1.2 Swim 400 m in less than 8 min without using equipment.
- 1.3 Retrieve three objects placed 5 m apart in water approximately 2 m deep, or in the deepest end of a pool where the depth is less than 2 m.

LEARNING OUTCOME 2: Demonstrate combined rescue without equipment.

Assessment Criteria:

- 2.1 Consecutively perform combined rescue technique in the following sequence in less than 2 min:
 - lifesaving entry (stride jump, slide entry); then,
 - 25 m freestyle with head above the water
 - surface dive to adult dummy/person (minimum depth of 1.5 m)
 - lift the dummy/person and tow minimum of 25 m to the edge of pool
 - lift the dummy/person out of the pool.

LEARNING OUTCOME 3: Demonstrate the use of land-based rescue simulation skills.

Assessment Criteria:

- 3.1 Lift conscious patient and transport them over a minimum distance of 25 m using a recognized patient transport technique.
- 3.2 Perform simulated rescue using a throwing aid to a conscious victim in the water over a minimum distance of 10 m.

LEARNING OUTCOME 4: Perform emergency response techniques including resuscitation and first-aid techniques.

Assessment Criteria:

- 4.1 Perform basic patient management techniques, including:
 - diagnosis/check for Dangers, Reaction, Airways, Breathing and Circulation (DRABC)
 - lateral position & patient rollover
 - calling for help
- 4.2 Perform resuscitation techniques, including:
 - Expired Air Resuscitation (adult, child, infant)

- Cardiopulmonary Resuscitation – CPR (adult, child, infant)
 - one- and two-person CPR operation
 - set up and apply oxygen equipment
- 4.3 Identify and perform first-aid techniques for managing injury and emergency, including:
- patient management
 - identifying and managing injuries (e.g. shock, fractures, arterial and venal bleeding, spinal injury)

LEARNING OUTCOME 5: Describe medical knowledge about a range of conditions associated with rescues.

Assessment Criteria:

- 5.1 Describe the application of appropriate emergency treatments in a rescue situation including CPR and spinal management.
- 5.2 Describe the use of medical equipment in emergency situations.
- 5.3 Identify regulations pertinent to managing emergency medical situations.
- 5.4 Identify and list medical services available for support in an emergency medical situation.

LEARNING OUTCOME 6: Choose and plan strategies to manage basic emergencies.

Assessment Criteria:

- 6.1 Identify and select possible strategies for water rescues and emergencies.
- 6.2 Identify and solve potential problems for putting plans into place.
- 6.3 Design a basic emergency management plan.
- 6.4 Practise emergency management plan.
- 6.5 Review and modify basic emergency management plan.

LEARNING OUTCOME 7: Identify and describe issues related to the facility/workplace.

Assessment Criteria:

- 7.1 List the specifications of the pool, including depth, access, use of hot tubs, etc.
- 7.2 List the nearest available safety services.
- 7.3 Find and use potential resources for use in rescue.

Assessment Strategy:

These learning outcomes are best assessed using the following common assessment methods:

- Observation (personal, video review)
- Oral questioning
- Written examination (short answer, multiple choice)
- Simulated rescue scenario

Range of Variables:

There are a number of variables that will affect the performance and assessment of the learning outcomes. These may include:

Variable	Scope
• Facilities	Swimming pool lengths/depths and measurements (metric/imperial). Use of alternative aquatic locations where pools are not available. Identification of equipment that is available for use.
• Dress	Candidates may be required to wear their recognized uniform.
• Candidates	Candidates will have experience and will be seeking employment or currently employed as a lifeguard.
• Resources	International Life Saving Federation member organizations will list and identify the use of theoretical and practical resources available to them.

Adapted from International Life Saving Federation, 2001

References

American Red Cross (1995) *Lifeguarding today*, Washington, DC.

International Life Saving Federation (2001) *International Pool Lifeguard Certificate*. Approved by ILS Board of Directors, September 2001.

Sport England & Health and Safety Commission (2003) *Managing health and safety in swimming pools*, 3rd ed. Sudbury, Suffolk, UK, HSE Books (HSG Series No. 179).