



British Sub-Aqua Club, Telford's Quay, South Pier Road, Ellesmere Port, Cheshire CH65 4FL

T: +44(0)151 350 6200 F: +44(0)151 350 6215 W: bsac.com

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Cover photograph by Adrian Collier

# **Contents**

Course arrangement	5
Lifesaver theory – (ST2 & SP1)	7
Lifesaver in-water skills	9
Lifesaver examination	15



# Lifesaver award

This Instructor Manual is intended to give BSAC Lifesaver Examiners guidance in the conduct of the BSAC Lifesaver Award training and examinations to ensure that the assessments and the procedures used conform to a consistent standard. It also provides a series of optional lessons which can be used to supplement or refresh candidates' skills and knowledge prior to the examination.

With the constantly increasing variety of diving equipment available, it is inappropriate to specify precise techniques which must be demonstrated in the examination. It is up to the examiner therefore, to interpret these notes with regard to the examination conditions experienced. The interpretation should be based upon currently recommended BSAC practices applied with a liberal amount of common sense. A rigid dogmatic adherence to a particular technique, when circumstances dictate that the technique is inappropriate, is not what is required.

### Course aim

The primary aim is to examine, under pool or sheltered water conditions, lifesaving proficiency specifically applicable to snorkelers and divers. A secondary aim is to examine the ability of divers to make use of their rescue skills in more general non-diving situations. The examination covers rescue methods suitable for use from shore or boat, by rescuers as they are likely to be dressed at the time, using aids that may reasonably be expected to be available.

#### Course overview

The Lifesaver Award is obtained by passing an examination which comprises two sections - a dry theoretical and practical test and a wet practical test. In summary, the candidates will be required to:

 Pass the theoretical examination by answering questions on respiration, circulation, lifesaving and relevant first aid/Basic Life Support.

- Demonstrate the correct procedures for effective delivery of Basic Life Support skills.
- Demonstrate the action to be taken for an unconscious vomiting casualty, and the recovery position.
- Perform a rope throwing rescue.
- Perform a buoyant aid rescue and tow.
- Perform a snorkel diver rescue including RB's and tow 25m to poolside / shore.
- Perform a scuba diver rescue from underwater including RB's and tow 25m to poolside / shore (scuba divers only).
- Perform a 25m rescue swim and 10m tow of a swimmer.
- Support an unconscious casualty at the surface.

Additional training prior to taking the examination is optional for students holding recognized rescue skills and first aid training. Students without the training will be required to complete all the lessons within this course to enable them to successfully achieve the standard required to gain the Lifesaver Award.

This Instructor Manual includes a series of lessons designed to cater for the possible training needs of students who wish to take the Snorkel Lifesaver Award. Snorkel and Ocean Divers may require additional training for the Basic Life Support skills not included in their training; Snorkel Divers may also require additional theory training; all participants may require specific additional training for throwing exercises and swimming rescues, which are not included in the Diver Training Programme. The practical training session will allow students to refresh or consolidate their skills before the examination.

- Lifesaver Theory covers material on Respiration, Circulation and Lifesaving including Basic Life Support practice using manikins, and provides recommendations for further reading.
- Lifesaver In-water Skills covers initial

- approach, rescue techniques and towing. It also covers the use of items for effective throwing rescues.
- In-water training requires a demonstration of each skill element with advice and guidance followed by each student having the opportunity to practice.

Course lead instructors are free to adapt the optional lessons dependent on the entry level of the students, however the course MUST cater for the lowest entry level student. The criteria set out for the examination itself must not be altered.

#### **Duration**

1 day. This should be sufficient for the examination and all of the optional prior training detailed below. The event may be spread over several weeks if preferred.

## **Entry level**

The prerequisites for this course are:

- 1. Current member of the BSAC.
- Minimum qualification of Snorkel Diver or Ocean Diver.

Snorkel Divers and Ocean Divers who wish to take this award will require additional training for the theory knowledge and Basic Life Support skills not included in their previous training. Lessons ST2 and SP1 are to be delivered to ensure this knowledge and skill gap is covered. Students holding the BSAC SDC Oxygen Administration qualification are deemed to be suitably qualified and therefore would not require the ST2 & SP1 lessons

## **Qualifications** awarded

Holders of the Lifesaver Award have demonstrated their lifesaving proficiency in snorkeling/diving and non-diving situations under pool or sheltered water conditions.

#### Examination/Assessment

The dry and wet tests may be examined in either order and on separate occasions but both must be completed within two months. Should a candidate fail either section, it may be retaken once, for an extra fee, within two months of the successful section. If the retake is failed, then both sections of the Lifesaver Award must be retaken.

#### Certification

Qualification Record Book Certificate, and optional Qualification Card.

# Course registration

Lifesaver Award courses and examinations must be arranged through HQ. Consult the BSAC website or HQ for current details and associated booking, declaration and report forms

# Instructor requirements

#### Instructor/Examiner Qualifications

Instruction must be supervised by a BSAC Snorkel Instructor or above (which includes Scuba grades Open Water Instructor or above) who hold the Lifesaver Award.

The final examination may be conducted by an instructor who has taught the candidates, although another instructor is preferable if possible.

#### Student: Instructor ratio

Student: instructor ratios for training should be in line with the guidance in the relevant parts of the Diver Training Programme referred to below (no limit for lectures; maximum 6:1 for pool sessions).

### **Venue facilities**

The in-water training and examination each require a pool or other sheltered water training area.

The pre-examination lifesaver theory lesson and examination require a classroom and a dry practical area.

Equipment and appropriate clothing requirements are detailed in the relevant lesson / examination sections

## **Administration**

When a group has been examined for the Lifesaver Award, the course Lead Instructor should complete the Lifesaver Award Examination Report form. Candidates are required to complete the online forms declaring that they have been instructed and examined in all the components of the course and final examination in the course documentation. HQ will issue the appropriate certificates and qualification cards once the Instructor and Student Declaration forms have been received.

# Lifesaver theory –

(ST2 & SP1)

# Lesson objectives

This is an optional classroom session to revise the rescue-related theory already taught in the DTP and to introduce students to further reading which they can use to expand their knowledge of this subject. Whether or not this lesson is required depends on the students: the stage they have reached in their training and how recently they did their training.

Students who are BSAC Snorkel Divers or BSAC Ocean Divers will require this additional training.

# Lesson contents

Students must be familiar with current lifesaving practices. Consult the BSAC Basic Life Support Guidelines, which can be downloaded from the BSAC website. Lessons ST2 & SP1 will be required to be given to cover the knowledge and skill gap for those students less than Sports Diver or not holding the BSAC SDC Oxygen Administration qualification.

The format of this lesson, if given as revision to qualified students, is at the discretion of the instructor.

# Achievement targets

At the end of this lesson students should:

- Have a basic understanding of Respiration, Circulation, and Lifesaving.
- Be aware of the BSAC publications which contain further information on diving rescue related topics.
- Understand different types of rescue.
- Understand the priorities of Basic Life Support.
- Understand how to practically administer Rescue Breaths and Chest Compressions utilising an AED.
- Understand the underlying principles of BLS.
- Be competent and confident in their ability to perform one rescuer BLS.
- Be competent and confident in their ability to deal with regurgitation of the casualty's stomach contents.
- Be competent and confident in their ability to place the casualty in the recovery position.
- Have covered the theory knowledge necessary to gain the Snorkel Lifesaver Award.

# Equipment needed

Normal clothing suitable for the practical element of the lesson should be worn.

One resuscitation manikin between two students and manikin wipes. (Manikins should be checked prior to this lesson to ensure they are in clean working order and should also be thoroughly cleaned at the completion of this lesson).

A training AED for use by each pair.

# Further reading

Encourage students to read the current edition of the BSAC Manuals 'Snorkeling for All', "The Diving Manual" and 'Safety and Rescue for Divers'. The Lifesaver Award Instructor Manual contains further references to relevant BSAC teaching materials.

8

# Lifesaver in-water skills

# Lesson objectives

This is an optional pool or sheltered water session to teach or revise those in-water practical skills which are needed for the Lifesaver Award. Whether or not this lesson is required depends on the students; the stage they have reached in their training, how recently they did their training and whether or not they have followed the advice they were given to 'practice, practice' subsequently.

The format and duration of this lesson, if given, is at the discretion of the instructor. The text below explains where the skills are covered in the SS1 lesson.

# Achievement targets

At the end of this lesson students should be competent and confident in their ability to:

- Rescue an unconscious snorkeler.
- Recover an unconscious scuba diver buddy to the surface using a controlled buoyant lift (scuba divers only).
- Administer static in-water rescue breathing.
- Tow a casualty to safety.
- Remove a casualty's equipment, with assistance, to prepare them for recovery from the water.
- Use ropes and buoyant aids to assist in a rescue.
- Rescue a swimmer without the use of equipment.

# Equipment needed

Snorkel students and their instructors will need a buoyancy device, mask, fins, snorkel and if necessary, a weightbelt.

Diver students and their instructors will need full scuba, mask, fins, snorkel and if necessary, a weightbelt.

Instructors should provide:

- A sufficient number of throwing ropes at least 12m in length (students are required to throw 10m).
- Buoyant objects for throwing. Soft objects are preferred eg, rescue buoys, SMBs, liferings
  etc, as may reasonably be found in a small boat. There is no objection to the chosen object
  containing a little water to give it some weight.

# Lesson contents

Most of the elements in this lesson require demonstrations. Depending on the number of students and the pool time available, it may be better to use helpers to perform the demonstrations rather than do them yourself. Ensure that the helpers are capable of flawless performances. The general protocol for rescues should be to minimize the risk to the rescuer, the casualty and others. To that end the generally accepted protocol that most lifesaving agencies follow is to "Reach, Throw, Wade, Row" before entering the water as a swimmer.

### 1. Rescue skills

Rescuing an unconscious buddy is taught in the Snorkel Diver and Ocean Diver courses. However the surface rescue skills including rescue breathing are not. The contents of the Sport Diver SS1 lesson on in water Rescue Breaths should be used.

Throwing skills are not taught in the current snorkel training programme or until Advanced Diver in the diver training programme. The following material is specific to the Lifesaver Award.

### Rope throw

Starting with a tidy but uncoiled rope (in a heap as it might be stacked without coiling when pulled from the water, no knots or tangles) at your feet, demonstrate how to prepare the rope (coiling it), throw the rope 10m so that it falls between the outstretched arms of a subject treading water. Point out the need to retain hold of one end of the rope. Tell the subject what to do with the rope, and then pull them to safety at the poolside at such a rate that their face remains clear of the water. Emphasise the need to be careful to avoid injuring the subject by pulling them so fast that they collide with the poolside/shore at the end of the tow. Subjects will often be on their backs, unable to see where they are going.

Get the students to practice until they can reliably throw the rope within one minute from the word 'go' until the moment the subject grasps the rope. There is no limit to the number of throws within the one minute period.

## **Buoyant aid**

Demonstrate how to throw a suitable buoyant aid at least 10m to within 2.5m of a swimmer treading water:

- Do not hit the subject (in a real rescue it may cause further distress to the casualty, and in the exam it will disqualify the throw).
- Give clear instructions to the subject. It is recommended that subjects be instructed to hold the buoyant aid close to their chests while lying on their backs.
- Adding a little water inside a container to give it some weight may make it easier to throw.
- Demonstrate how to swim out and escort the subject back to safety.
- Continue to give the subject clear instructions and encouragement during your swim out to them.
- Swim alongside or slightly in front of the subject.
- Use a non-contact tow only if the subject is incapable of self-propulsion. Tow the subject from behind and avoiding direct contact. For instance, take hold of the buoyant aid, suit, snorkel buoyancy vest, strap etc, as appropriate. Show that the tow could be released before a panicking subject could grasp the rescuer.
- The tow ends in deep water and the rescuer, still in the water, helps the subject to get out of the water.

Get the students to practice throws until they can consistently get at least one out of three objects landing within 2.5m of a subject at least 10m away without hitting them.

Then get the students to practice the whole throw/swim out/tow/assist exit process.

## 2. Snorkelling rescue

Demonstrate the procedures required to effectively rescue a fully equipped snorkel diver who is unconscious and not breathing by another similarly equipped snorkel diver.

The rescue commences in deep water with the rescuer 10m away from the subject, who is floating face down in the water. The rescuer closes with the subject, rolls the subject face up and inflates his buoyancy device if worn. Depending on the method of emergency inflation − eg CO₂ cartridge − operation of the inflation mechanism may need to be simulated. In this event the subject should inflate their own buoyancy device orally before replacing their mask and snorkel and resuming an inert condition.

The rescuer then calls for assistance, shouts "Help", removes the subject's mask and snorkel, their own snorkel and, if necessary, their own mask before commencing 1 minute of RB (approximately 10 breaths). The rescuer should then commence towing the subject 25m to shallow water. During the tow the rescuer should look round from time to time to check the direction of progress.

Once in shallow water the rescuer should then explain to the examiner how they would remove the subject from the water using whatever assistance would reasonably be available.

Rescuers and subjects should wear swimming costumes plus mask, fins, snorkel, (snorkel lifejacket if normally worn) and, if required, quick release weightbelt. Both subject and rescuer should be neutrally buoyant.

### Snorkelling rescue

Demonstrate the rescue, emphasising the following points:

- Location of subject monitored throughout the swim out.
- Swim out paced so that rescuer does not reach the subject too tired to proceed.
- Inflation of subject's lifejacket without fumbling if worn (advantage of buddy check).
- Call for assistance and shouts "Help".
- Removal of subject's mask and snorkel.
- Rescuer's mask removed if necessary for effective RB, but not deliberately discarded.
- Adequate extension of subject's neck.
- Effective seal over subject's nose held for approximately 1 seconds (transient contact does not simulate the time required for effective lung inflation).
- Subject's mouth held closed during mouth-to-nose and then released between breaths.
   Explain that this is more comfortable for subjects during exercises, and allows the possibility that the casualty may start breathing spontaneously in real rescues. In a real rescue in rough conditions it may be prudent to keep the unconscious subject's mouth closed to prevent water ingress.
- Tow with suitable sense of urgency but not to the extent that the student finishes the tow too exhausted to contribute to the removal of the subject from the water.
- Rescuer walks as soon as the water is shallow enough to do so and tows the casualty to the poolside or to standing depth in readiness to remove the casualty.

At the end of the rescue run through the issues associated with removing the casualty from the water. Point out the methods available in the circumstances and their pros and cons. Emphasise that assistance used to remove the subject from the water should reflect the philosophy

of doing it in the easiest yet most effective way. The abilities of the assistant would need to be determined, by questioning if necessary, but would subsequently be utilised to the full, even taking over RB (if competent) to offload the tired rescuer.

Observe the students while they carry out the rescue (including the 25m swim). Point out any areas for development, and if necessary get them to repeat until they show confidence and competence.

### **SCUBA Rescue (SCUBA Divers only)**

This element requires one fully kitted SCUBA diver to rescue another who is unconscious and not breathing. The rescue commences with the subject face down on the pool bottom (depth 2 to 4m) approximately 4m from the rescuer. The rescuer recovers the subject to the surface; makes the casualty and themselves buoyant and calls for assistance, shouts "Help", removes the casualty's mask and mouthpiece; gives RB for one minute; tows them at least 25m to shallow water; and dekits the subject ready for removal from the water.

This rescue is intended to simulate the situation where an incident occurs some way through a dive, when the rescuer may already be fatigued. It is for this reason that this element should follow the Snorkeling Rescue described in the preceding element.

Rescuers and subjects should wear normal protective clothing, BC, mask, fins, snorkel, aqualung and, if necessary a weightbelt.

#### Neutral buoyancy

Both subject and rescuer must first demonstrate neutral buoyancy to their instructor. They should be able to attain neutral or slightly negative buoyancy when hovering between the surface and the bottom with all gas expelled from their drysuit and BC.

#### CBL, tow and dekit

Demonstrate how to perform this rescue. It is not essential for the instructor to tow for the whole 25m. Emphasise the following points:

- » Positive hold of the subject at all times.
- » Rescuer operates controls of subject's equipment without fumbling (demonstrating benefit of buddy check).
- » Subject kept more positively buoyant than candidate during CBL, and rate of ascent kept under control. Subject's BC inflated immediately on reaching surface. Drysuit inflation is not an acceptable alternative: if necessary ditch weights.
- » Rescuer makes themselves positively buoyant.
- » Call for assistance and shouts "Help".
- » Subject's mask and mouthpiece cleared out of the way.
- » Adequate neck extension not impeded by overinflated BC (might occur if subject was heavily overweighted).
- Effective seal over subject's nose held for approximately 1 second (transient contact does not simulate the time required for effective lung inflation).
- Subject's mouth held closed during mouth to nose and then released between breaths. (This is more comfortable for subjects during exercises, and allows the possibility that the casualty may start breathing spontaneously in real rescues. Remind students that in a real rescue in rough conditions it may be prudent to keep the unconscious subject's mouth closed to prevent water ingress).
- » One minute of effective RB's (10) before commencing towing.

- » Fast removal of kit with no further RB prior to 'landing' of casualty.
- » Remind the students that assistance should be used to remove the subject from the water if possible. The abilities of the assistant need to be determined, by questioning if necessary, but should subsequently be utilised to the full. The exact approach depends on circumstances but should reflect the philosophy of doing it in the easiest yet most effective way. Heavy equipment (both own and subject's) would be removed while the subject was supported by their BC and then the subject removed from the water making the most practical use of assistance.

Get the students to perform the rescue, observing their performance and offering advice or suggesting repetition as required. After they have dekitted their subject ask them to explain how they would remove them from the water using whatever assistance would reasonably be available. Ask them to demonstrate if you think the explanation is insufficient.

## 3. Swimmer support

This final element tests the rescuer's ability in a non-diving situation such as may occur at any time where activities on or around water are concerned.

Rescuers and subjects should wear a swimsuit only.

# Unresponsive & non-breathing subject

The rescuer enters the deep water as if for unknown conditions and swims 25m to an unconscious, non-breathing subject floating face down on the surface; turns the subject into the face up position; tows the subject 10m to the side (deep water) and secures the casualty; removes the subject from the water with assistance if available.

There is no set time limit to this rescue.

Demonstrate the rescue. It is not essential for the instructor to tow for the whole distance. Emphasis the following points:

- Cautious entry into the water keeping subject in sight.
- Speed of swim to casualty as fast as possible consistent with continuous monitoring of location of subject during swim out, and need for rescuer to remain capable of completing the entire rescue.
- Subject quickly turned face up.
- Distress signal on initial contact.
- Secure grip for tow.
- Subject's face kept clear of water during tow.
- Secure support position.
- Clear, firm instructions to assistant.
- Adequate protection for the subject's head.
- Do not remove subject from pool with back to side risk of injury.
- Subject moved to a safe distance from the water ready to commence BLS and First Aid.

Get the students to perform the rescue, observing their performance. Point out any areas for development, and if necessary, get them to repeat until they show confidence and competence.

### Unresponsive but breathing subject

The rescuer supports the head and face of a breathing but unconscious subject above water for a period of two minutes. The subject should be briefed to remain completely limp throughout this exercise and should make no hand, arm or leg movements.

Demonstrate the rescue technique, resting subject's head clear of the water on the rescuer's chest or shoulder. Point out that movement around the pool is acceptable during this exercise.

Get the students to attempt the exercise for two minutes observe their performance. Point out any areas for development, and if necessary, get them to repeat until they show confidence and competence.

# 5. Debriefing

Instructors should conduct a full debrief of the lesson using the REAP format ensuring student participation and clearly indicating areas of development that may be required to achieve the standard to pass the examination phase.

# Lifesaver examination

# Skills Performance Standard

The general skills performance standards which apply to all elements of the examination are set out in this section. Specific standards applicable to a particular element are set out in each corresponding section below.

The following general principles of lifesaving apply throughout the examination:

- Once the rescuer has made contact, it must be maintained without a break until the rescue is completed.
- Whenever RB is being applied during a rescue, the greatest training benefit and the most accurate assessment is obtained if the rescuer makes the appropriate seal over the subject's mouth or nose (although the rescuer should only blow into the subject when a training manikin is being used). While rates of RB are quoted for guidance, the emphasis will be on effective RB rather than the maintenance of a precise rate.
- If any action or technique used by the rescuer reduces the safety or effectiveness of the rescue as demonstrated, the examiner must take this into account when assessing the candidate. This especially applies where the candidate is given a choice of action.
- During the rescue the rescuer must demonstrate the appropriate sense of urgency compatible with the effective execution of the rescue.
- BSAC recommended rescue techniques are to be used throughout.
- During towing rescues, the rescuer should not deliberately discard his/her own mask, and snorkel / Demand Valve.
- Throughout the examination, the overriding question in the examiner's mind must be, "if it was being done for real, would it work?" The detail of the technique being used must not be allowed to confuse this question. The BSAC has developed recommended techniques for lifesaving which form a sound basis for training. However, it is accepted that certain individuals or certain equipment combinations will require these techniques to be modified and this should be taken into account.
- The object of the assessment is to determine whether the candidate is capable of saving a life
  and the technique used is only the means to an end, not the end itself. Encourage students to
  do what they think is best in the prevailing circumstances, and not simply to do what they think
  the examiner wants.

Candidates will not gain the Lifesaver Award if:

- They fail to make a time limit.
- They fail to meet throwing accuracy criteria.
- They fail to achieve a score of 80% in the theory examination.
- They are unable to conduct effective BLS.
- They do not, in the examiner's opinion, achieve the required standard in any of the practical assessments.

 The candidate may be permitted one 'lowest level' section (eg Swimmer Support: Nonbreathing Subject) retake immediately after the examination at the discretion of the examiner.
 No intervening instruction may be given.

# **Equipment needed**

Snorkel students and their instructors will need a buoyancy device, mask, fins, snorkel and if necessary, a weightbelt.

Diver students and their instructors will need full scuba, mask, fins, snorkel and if necessary, a weightbelt.

Instructors should provide:

- A sufficient number of throwing ropes at least 12m in length (students are required to throw 10m).
- A sufficient number of buoyant objects for throwing. Soft objects are preferred eg, rescue buoys, liferings, SMBs, etc. as may reasonably be found on the diving site. There is no objection to the chosen object containing a little water to give it some weight. No line is to be attached to the rescue aid.
- A sufficient number of training manikins hygienic wipes and cleaning materials.
- A suitable training AED.
- A sufficient number of subjects to be rescued. Normally students will take turns at being subject and rescuer, but if circumstances, such as limited pool time, require it additional subjects may be used. Both the subject and the rescuer are to be dressed in accordance with the instructions below. Subject and rescuer are to be of a similar size and build wherever possible.

# **Examination contents**

# 1. Briefing of candidates and subjects

Do not assume that the candidate will know the syllabus off by heart. Their training may well have covered the elements of the syllabus in a different order and exam nerves will in any case introduce uncertainty into the candidates' minds as to what is expected of them. Ensure that you (or the Lead Examiner) explain to the candidates exactly what is required of them at the start of each element of the assessment.

Explain to the candidates that there may be several ways of dealing with any lifesaving situation. It is up to them to choose the approach they think is most appropriate in the circumstances. In most cases there is no single right answer (though there may be many more wrong ones). During the examination you may be questioning the techniques they have used, and asking them to justify their actions.

Throughout the examination it is just as important to brief the subjects of what is expected of them as it is to brief the candidates. Where subjects are meant to be unconscious it is imperative that they act completely limp. Any stiffness or action on the part of the subject will confuse the assessment of the candidate. Where this happens, it may be necessary to ask the candidate to repeat that part of the examination using a more 'realistic' subject. Ensure that this point is made to the subjects in their briefing so that they are aware of the consequences of not following the briefing.

# 2. Dry examination phase

### Theory examination

Candidates should be briefed by the Lead Examiner on the format of the examination. Full instructions are printed on each examination paper. Candidates must achieve a score of 80% or more to pass the Lifesaver theory examination.

### **Practical Basic Life Support**

Using a resuscitation training manikin and training AED the candidate will demonstrate and explain to the examiner the correct priorities for effective BLS (DRABC) with CC combined with RB. The recommended sequence is 30 CC followed by 2 RB at a rate of 100-120 compressions per minute. This should be acted out by a single operator for a minimum of 3 minutes utilizing a training AED.

Under no circumstances whatsoever should simulated BLS skills be performed on a live subject. The use of a training manikin is mandatory for this section of the assessment.

# Skills Performance Standard

During the assessment assess the candidate's performance against the following points:

- Check response Explain to the examiner the meaning of AVPU– Alert/ responds to Voice/ responds to Pain/ Unresponsive.
- Call for assistance and shouts "Help".
- Check for normal Breathing (10 seconds) by observing breath sounds and feel, and chest movement.
- Simulate going for or making the appropriate call for emergency medical assistance (examiner to simulate emergency call operator and provide the training AED).
- Correct use of the AED.
- Correct positioning of hands on casualty's chest, adequate depression of chest (5-6cm).
- Regular, effective rhythm (100-120 bpm).
- Sequence of 30 CC:2 RB.

## Unconscious regurgitating casualty and recovery position

Using a live subject demonstrate to the examiner the action to be carried out when a casualty laying on their back begins to regurgitate. Demonstarte an effective method of placing a casualty into the recovery position.

# Skills Performance Standard

The action for a regurgitating casualty and the placing of the subject into the recovery position should both commence with a live subject lying flat on his/her back. The action for regurgitating should instigated by the examiner.

The candidate should demonstrate a quick reaction to the condition. Vomit should be cleared and the mouth and throat checked before the rescuer returns the subject to his/her back ready to recommence simulated BLS.

When instructed to do so by the examiner the candidate should position the subject in the recovery position.

The candidate should demonstrate the following:

- Adequate protection of the head during positioning.
- Good neck extension.
- Mouth / nose angled downwards, head raised on hand maintaining and open airway.
- Arms and legs positioned to give a stable posture, keeping subject's weight off the chest.
- Check the casualty for continued normal breathing once in the recovery position.

## 3. In/on water examination

The following sections of the practical in/on water examination must be carried out in the order specified.

### Throwing rescue

This part of the examination simulates that a diver without basic kit has fallen from either a boat which is unable to approach the casualty, or a jetty. The time limit on the rope throwing instils some urgency, and the limit on the number of rescue aids that may be thrown encourages accuracy (and care as a 'hit' discounts that throw). A rope enables the subject to be pulled to the boat or jetty: a buoyant rescue aid does not, so the subject must be fetched. Note that the rescuer is without basic kit and does not have time to fit any.

Dress: Normal swimming attire appropriate to conditions is to be worn. Additional items (eg. Snorkel vests or lifejackets if used) as would be expected to be worn during normal diving activities. The standard of dress is intended to ensure that the candidate's throwing arm may be restricted as it would be in reality. Subjects must be neutrally buoyant.

#### Rope throw

Starting with a tidy but uncoiled rope at the rescuer's feet, the rescuer must throw the rope 10m so that it falls between the outstretched arms of a subject treading water. The rescuer must retain hold of one end of the rope. The subject must be told what to do with the rope, and are then pulled to safety at the poolside / shore.

There is a time limit of one minute from the word 'go' until the moment the subject grasps the rope.

There is no limit to the number of throws within the one minute period.

'Tidy but uncoiled' means in a heap as it might be stacked without coiling when pulled from the water, no knots or tangles.

Skills Performance Standard: the candidate should demonstrate familiarity with the handling of ropes during this exercise by handling the rope confidently and performing a 'clean' throw. The subject should be treading water with arms stretched out sideways and the rope should fall across the outstretched arms without requiring any movement by the subject.

The candidate should give the subject clear instructions and should pull the subject to the poolside / shore at such a rate that their face remains in clear of the water.

#### Buoyant aid

The rescuer must throw a suitable buoyant aid at least 10m to within 2.5m of a swimmer treading water. The rescuer instructs the subject in its use as a rescue aid, and then the rescuer swims out and tows the subject back to the poolside. The tow ends in deep water and the rescuer, still in the water, helps the subject to get out of the water. It is recommended that the subject be instructed to hold the buoyant aid close to their chest while lying on their back. During the tow the rescuer should avoid direct contact with the subject and, for instance, take hold of the buoyant aid, suit, snorkel buoyancy vest strap etc, as most suitable if required.

# Skills Performance Standard

- The candidate should give the subject clear instructions and encouragement not only from the side of the pool but also during the swim out to the subject.
- Hitting the subject, or being outside the 2.5m range will disqualify the throw. A maximum of three objects may be thrown.
- A non-contact tow should be performed with the candidate towing the subject from behind
  or by such means that the tow could be released before a panicking subject could grasp the
  rescuer. At the poolside the subject should be assisted from the water by a means suitable for
  a conscious and co-operative person. The candidate should give suitable instructions to the
  subject throughout.

### Snorkelling rescue

This section requires a fully equipped snorkel diver to rescue another similarly equipped snorkel diver who is unconscious and not breathing. The rescue commences with the casualty in deep water with the rescuer on poolside / shoreside 25m away from the subject, who is floating face down in the water. The rescuer closes with the subject, rolls the subject face up and inflates his buoyancy device (if worn). Depending on the method of emergency inflation − eg CO₂ cartridge − operation of the inflation mechanism may need to be simulated. In this event the subject should inflate his own buoyancy device orally before replacing his mask and snorkel and resuming an inert condition. Once the rescue breaths are completed the tow 25m tow should be commenced back to shore.

The rescue is continued until the casualty is at a safe point to be removed from the water.

Dress: as in throwing rescue above plus mask, fins, snorkel and, if required, quick release weightbelt. Both subject and rescuer should be neutrally buoyant.

# Skills Performance Standard

At the commencement of this rescue the subject should be floating face down at the surface. As the rescue proceeds, check the following points:

- Location of subject monitored throughout the swim out.
- Swim out paced so that rescuer does not reach the subject too tired to proceed.
- Inflation of subject's lifejacket without fumbling if worn (advantage of buddy check).
- Call for assistance and shouts "Help".
- Removal of subject's mask and snorkel.
- Rescuer's mask removed if necessary for effective RB, but not deliberately discarded.
- Adequate extension of subject's neck.
- Effective seal over subject's nose held for approximately 1 seconds (transient contact does not simulate the time required for effective lung inflation).
- Subject's mouth held closed during mouth-to-nose and then released between breaths.
   Explain that this is more comfortable for subjects during exercises, and allows the possibility that the casualty may start breathing spontaneously in real rescues. In a real rescue in rough conditions it may be prudent to keep the unconscious subject's mouth closed to prevent water ingress.

- Tow with suitable sense of urgency but not to the extent that the student finishes the tow too
  exhausted to contribute to the removal of the subject from the water.
- Rescuer walks as soon as the water is shallow enough to do so and tows the casualty to the
  poolside or to standing depth in readiness to remove the casualty.
- The candidate's explanation of how assistance would be used to remove the subject from
  the water should reflect the philosophy of doing it in the easiest yet most effective way. The
  abilities of the assistant would need to be determined, by questioning if necessary, but would
  subsequently be utilised to the full, even taking over RB (if competent) to offload the tired
  candidate.

### Scuba rescue (Scuba divers only)

This element requires one fully kitted scuba diver to rescue another who is unconscious and not breathing. The rescue commences with the subject face down on the pool bottom (depth 2 to 4m) approximately 4m from the rescuer. The rescuer recovers the subject to the surface using a CBL; makes the casualty and themselves buoyant and calls for assistance, shouts "Help", removes the casualty's mask and mouthpiece; gives RB for one minute; tows them at least 25m to shallow water; and dekits the subject ready for removal from the water.

This rescue is intended to simulate the situation where an incident occurs some way through a dive, when the rescuer may already be fatigued. It is for this reason that this element should follow the Snorkeling Rescue described in the preceding element.

Rescuers and subjects should wear normal protective clothing, BC, mask, fins, snorkel, SCUBA and, if necessary, weightbelt.

- Complete a full rescue incorporating CBL, RB's 25m tow and dekit the casualty. As the rescue proceeds assess the performance for the points below:
  - » Positive hold of the subject at all times.
  - » Rescuer operates controls of subject's equipment without fumbling (demonstrating benefit of buddy check).
  - » Subject kept more positively buoyant than candidate during CBL, and rate of ascent kept under control. Subject's BC inflated immediately on reaching surface. Drysuit inflation is not an acceptable alternative: if necessary ditch weights.
  - » Call for assistance and shout "Help".
  - » Subject's mask and mouthpiece cleared out of the way.
  - » Adequate neck extension not impeded by overinflated BC (might occur if subject was heavily overweighted).
  - » Effective seal over subject's nose held for approximately 1 second (transient contact does not simulate the time required for effective lung inflation).
  - Subject's mouth held closed during mouth to nose and then released between breaths. (This is more comfortable for subjects during exercises, and allows the possibility that the casualty may start breathing spontaneously in real rescues. Remind students that in a real rescue in rough conditions it may be prudent to keep the unconscious subject's mouth closed to prevent water ingress).
  - One minute of effective RB's (10) before commencing towing.
  - » Fast removal of kit with no further RB prior to 'landing' of casualty.

After they have dekitted their subject ask them to explain how they would remove them from the water using whatever assistance would reasonably be available. Ask them to demonstrate if you think the explanation is insufficient.

20

#### Swimmer support

This final section tests the rescuer's ability in a non-diving situation such as may occur at any time where activities on or around water are concerned.

Dress: Rescuers and subjects should wear a swimsuit appropriate to the conditions only.

#### Non-breathing subject

The rescuer enters the deep water as if for unknown conditions and swims 25m to an unconscious, non-breathing subject floating face down on the surface; turns the subject into the face up position; tows the subject 10m to the side (deep water) and secures the casualty; removes the subject from the water with assistance.

There is no set time limit to this rescue the following points should be assessed:

- » Cautious entry into the water keeping subject in sight.
- » Speed of swim to casualty as fast as possible consistent with continuous monitoring of location of subject during swim out, and need for rescuer to remain capable of completing the entire rescue.
- » Subject quickly turned face up.
- » Distress signal on initial contact.
- » Secure grip for tow.
- » Subject's face kept clear of water during tow.
- » Secure support position.
- » Clear, firm instructions to assistant.
- » Adequate protection for the subject's head.
- » Do not remove subject from pool with back to side risk of injury.
- » Subject moved to a safe distance from the water ready to commence BLS and First Aid.

#### Breathing subject

This exercise is conducted in deep water. There is no requirement for an assessed entry and swim. This exercise can commence when the casualty and rescuer are in position and the examiner is ready to start the timer. The rescuer supports the head and face of a breathing but unconscious subject above water for a period of two minutes. The subject should be briefed to remain completely limp throughout this exercise and should make no hand, arm or leg movements.

# Skills Performance Standard

- The subject should be briefed to remain completely limp throughout this exercise and should make no hand, arm or leg movements.
- During the candidate's efforts to support the subject's face clear of the water, movement around the pool is acceptable and the duration of the test should be for the full two minutes.













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