



Australian Government

SISOSCB006 Perform diver rescues

Release: 1

SISOSCB006 Perform diver rescues

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to both lead, and complete diver rescues using a range of dive specific techniques. It requires the ability to fully assess the situation, determine a response and complete rescues using methods and equipment appropriate for the situation. It also covers the administration of in-water rescue breathing, and oxygen.

This unit does not require the provision of first aid, which is covered in other units, but does require the recognition and assessment of common diving related illnesses and injuries.

It applies to dive leaders, usually known as divemasters or instructors who work independently in the field using discretion and judgement to manage problems and emergencies when they arise.

This unit applies to any type of organisation that delivers SCUBA diving activities and dive instruction including commercial, not-for-profit and government organisations.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

SISOSCB001 SCUBA dive in open water to a maximum depth of 18 metres

Competency Field

SCUBA Diving

Unit Sector

Outdoor Recreation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1. Determine rescue requirements and prepare for rescue.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Identify divers in need of rescue and determine their condition.
- 1.2. Assess situation, identify hazards promptly, assess risks

- and manage to avoid injury to self and others.
- 1.3. Determine appropriate rescue methods and techniques for situation, according to degree of urgency and condition of divers in need of rescue.
 - 1.4. Select rescue equipment according to requirements.
 - 1.5. Assess abilities, establish a chain of command and allocate roles and responsibilities to others.
 - 1.6. Provide clear and concise instructions and confirm rescue crew understanding of roles, communication protocols and rescue actions.
 - 1.7. Implement rescue operations according to organisational policies and procedures for emergency response.
2. Rescue divers.
- 2.1. Use equipment and rescue techniques appropriate to situation.
 - 2.2. Provide reassurance and clear and concise instructions to divers being rescued.
 - 2.3. Rescue divers on surface, using techniques appropriate to situation.
 - 2.4. Assist responsive divers to surface and to reach boat or shore.
 - 2.5. Bring unresponsive divers to the surface, provide in-water rescue breathing, and tow to boat or shore.
 - 2.6. Maintain safety of self, others and rescuees throughout rescue operations.
 - 2.7. Evaluate and monitor condition of rescued divers and determine need for first aid, medical treatment or evacuation.
 - 2.8. Utilise underwater search patterns to locate missing divers.
3. Use supplemental oxygen.
- 3.1. Assess diver casualty to identify need for supplemental oxygen.
 - 3.2. Administer oxygen, as authorised by organisation and allowed under local law.
4. Debrief and complete reports.
- 4.1. Participate in incident management debrief and identify future response improvements.
 - 4.2. Complete required incident reports according to organisational procedures.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance

criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	• interpret detailed familiar organisational policies and procedures for emergency response.
Writing skills to:	• record detailed and accurate factual information about rescue responses.
Oral communication skills to:	• use clear and unambiguous verbal and non-verbal communications to make intent known.
Teamwork skills to:	• pro-actively and cooperatively direct and work within teams to coordinate rescue logistics, solve arising problems and effect efficient rescues.
Self-management skills to:	• critically analyse all circumstances and implications to coordinate a considered response to rescue requirements.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>

Assessment Requirements for SISOSCB006 Perform diver rescues

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and complete a range of simulated rescue operations:

- collectively cover responses to all of the following diver issues:
 - panicked diver at the surface and underwater
 - over exerted diver at the surface and underwater
 - vertigo
 - cramping
- complete two surface non-swimming assisted rescues and collectively use reach and extension techniques
- complete two surface swimming assisted rescues while consistently entering the water without losing sight of the diver in need and:
 - establish diver's buoyancy
 - execute rescues with and without floatation devices
 - execute towing with and without equipment removal
 - use two towing techniques
- complete two underwater rescues while consistently maintaining buoyancy of self and rescued diver both underwater and at the surface:
 - use an alternate air source to provide air to a diver, and make a controlled air sharing ascent
 - bring an unresponsive diver to the surface
- provide one surface in-water rescue, using two of the following breathing techniques while consistently controlling an open airway:
 - mouth-to-pocket mask
 - mouth-to-mouth
 - mouth-to-nose
- assist divers to exit the water as follows:
 - one responsive diver without assistance
 - one responsive diver with assistance from team members
 - one unresponsive diver without assistance
 - one unresponsive diver with assistance from team members
- for at least one simulated rescue bring together multiple elements of rescue operations to include:
 - bringing an unresponsive diver to the surface

- establishing buoyancy both underwater and at the surface
- providing on surface in-water rescue breathing
- towing diver
- assisting diver to exit the water
- set up oxygen equipment on one occasion
- administer oxygen using a pocket mask on one occasion (where not prohibited by local legal requirements)
- complete one underwater search for missing divers using a search pattern to be chosen from the following list:
 - linear
 - circular
 - U pattern
 - jack stay
 - expanding square
- for each rescue operation:
 - consistently negotiate hazards safely and effectively
 - establish a chain of command, allocate and communicate roles and responsibilities to team members and participants to effectively complete rescues
 - participate in a debrief and complete an incident report.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for emergency response
- principles of a chain of command as relevant to dive rescue operations
- roles and responsibilities that can be allocated to team members and participants to effectively complete a diver rescue
- communication protocols for dive rescue operations:
 - hand signals
 - calls
 - whistles
- diver issues that can occur during SCUBA diving activities:
 - panicked diver
 - over exerted diver
 - drowning
 - vertigo
 - cramping
 - temperature related problems including hypothermia and hyperthermia
 - pressure related injuries including decompression sickness, arterial gas embolism and other lung overexpansion injuries

- stings or bites from marine animals
- diver low or out of air
- equipment related problems including over weighting
- missing diver
- for the above issues:
 - signs that indicate need for rescue and or first aid
 - how they affect choice of rescue techniques
 - appropriate actions and communications with the rescued diver
 - risks related to the rescue diver
 - first aid treatments for those that relate to illness or injury
- for surface non-swimming assisted rescues, features, functions and techniques used with rescue equipment:
 - reach equipment
 - throw bags, lifebuoys and slings
 - throw ropes
- for surface swimming assisted rescues, techniques for:
 - entering water without losing sight of diver in need
 - using floatation equipment
 - removing equipment from rescued diver and considerations for doing this
 - towing with and without equipment removed
- for underwater rescues, techniques used for:
 - establishing and maintaining buoyancy of rescued diver, both underwater and at the surface
 - using an alternate air source to provide air to a diver, and making controlled air sharing ascents
 - assisting responsive divers to the surface
 - bringing unresponsive divers to the surface while controlling buoyancy
- techniques for providing in-water rescue breathing:
 - removing equipment
 - opening the airway
 - mouth-to-pocket mask
 - mouth-to-mouth
 - mouth-to-nose
- techniques for:
 - assisting responsive divers to exit the water, with and without assistance from team members
 - exiting unresponsive divers from the water, with and without assistance from team members
- for oxygen administration:
 - situations that require the use of oxygen and benefits to divers
 - features, functions and operation of oxygen delivery systems, pocket masks

- appropriate flow rates
- hazards associated with the administration of oxygen and methods used to manage these
- team members that are authorised to administer oxygen and any legal requirements applicable in the local state or territory
- options that are available post rescue, when these might be used and how to contact authorities to assist:
 - assisted treatment via remote communications
 - emergency evacuation and medical treatment
 - hyperbaric chamber
- underwater search patterns used to locate lost divers, advantages and disadvantages of each:
 - linear
 - circular
 - U pattern
 - jack stay
 - expanding square
- format, inclusions and use of incident reports.

Assessment Conditions

Skills must be demonstrated in an open water site during daylight hours. Dives can be completed from either a boat or from the shore.

Assessments, for rescues, can only be completed through simulated activities. Simulations must incorporate time critical requirements.

During assessment:

- direct vertical access to the surface must be possible; aquatic plants are not considered an overhead obstruction
- surfacing an unresponsive diver can only be completed at a maximum depth of 9 metres
- the following resources must be available to replicate industry conditions of operation:
 - first aid equipment
 - communication equipment for emergency response
 - diver flags of a type and size that meet local maritime regulator requirements.

Assessment must ensure use of:

- people who act as team members, participants and rescuees with whom the individual interacts during simulated rescues
- fins
- masks
- snorkels
- cylinders and valves

- buoyancy control devices with low pressure inflators
- regulators with submersible pressure gauges
- alternative air source
- weight ballast systems
- exposure suits suitable for conditions
- timing devices
- depth gauges
- underwater compasses
- rescue equipment:
 - reach equipment
 - throw bags, lifebuoys or slings
 - throw ropes
- oxygen equipment:
 - oxygen delivery systems
 - pocket masks or other barrier devices
- template incident reports
- organisational policies and procedures for emergency response.

Assessors must satisfy the Standards for Registered Training Organisations requirements for assessors, and:

- be an individual who is currently certified and sanctioned by an industry authorised organisation to teach and assess diver rescues.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>