



Australian Government

Department of Education, Employment and Workplace Relations

PUASAR032A Undertake vertical rescue

Revision Number: 2

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Modification History

Release	TP version	Comments
2	PUA12 V1	Layout adjusted.
1	PUA00 V8.1	First release in TGA.

Unit Descriptor

This unit covers the competency required to undertake vertical rescue in a range of emergency situations in natural and man-made environments.

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

Application of the Unit

The application of this unit in the workplace covers a range of vertical rescue situations. The unit is typically performed by personnel from emergency services and/or volunteer organisations.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

PUASAR022A Participate in a rescue operation

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare and respond to vertical rescue	<p>1.1 <i>Operation and task information</i> is obtained from a variety of <i>sources</i> and analysed, and team roles are confirmed.</p> <p>1.2 <i>Vertical rescue equipment</i> is selected based on incident information and is checked to ensure it is ready for use.</p> <p>1.3 Personal protective equipment for vertical rescue is selected.</p>
2. Assess scene	<p>2.1 Appropriate actions are taken to preserve incident scene.</p> <p>2.2 Scene reconnaissance is conducted and results are reported.</p> <p>2.3 <i>Scene management procedures</i> are followed in accordance with vertical rescue procedures and legal requirements.</p> <p>2.4 <i>Physical and environmental features</i> of scene are assessed before deploying rescue resources.</p> <p>2.5 Risk assessment is conducted and communicated as per organisational procedures.</p> <p>2.6 Access is controlled and a safe and effective <i>operational environment</i> is maintained.</p> <p>2.7 Communication with other personnel on site is established and maintained including team and safety briefings relevant to task.</p> <p>2.8 Location and condition of casualty is determined.</p>
3. Establish vertical rescue system	<p>3.1 Rescue <i>system</i> is constructed according to type of incident.</p> <p>3.2 Anchors are established and monitored.</p> <p>3.3 Equipment is prepared and techniques are used in accordance with manufacturer's guidelines and organisational procedures.</p>
4. Perform vertical rescue	<p>4.1 Hygiene precautions are maintained in accordance with organisational requirements.</p> <p>4.2 Access is gained to casualties or trapped persons using organisationally approved techniques and equipment.</p> <p>4.3 Casualties or trapped persons are secured and prepared for removal in consultation with medical personnel.</p> <p>4.4 Casualties are removed using <i>vertical rescue techniques</i> and equipment while preventing further injury.</p> <p>4.5 Scene is <i>preserved</i> for investigating officers.</p>

ELEMENT**PERFORMANCE CRITERIA****5. Terminate vertical rescue operations**

- 5.1 Equipment is recovered, cleaned and serviced in accordance with manufacturer's guidelines and organisational procedures.
- 5.2 Where identified, signs and symptoms of operational stress are recognised and reported.
- 5.3 Operational debrief is conducted and ***operational documentation*** is completed to organisational standards.
- 5.4 Decontamination procedures are followed in accordance with organisational procedures.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- check, service and maintain vertical rescue equipment
- control infection
- escort stretchers in raising and lowering operations
- establish, maintain, monitor and use:
 - ascent and descent systems
 - safety systems
 - stretcher rigging
- implement safe and effective scene management procedures
- manage edge protection
- treat and package casualties
- undertake scene assessment and reporting
- use personal protective and rescue equipment within its safe work limitations
- wear appropriate personal protective and rescue equipment correctly
- work in a team

Required Knowledge

- breaking strains
- casualty assessment and packaging
- emergency management and interagency arrangements
- equipment characteristics
- operation of high lines (span line, Tyrolean etc.)
- operational briefing and debriefing procedures
- organisational procedures for cleaning and discarding equipment in terms of environmental management and sustainability
- organisational procedures for operating vertical rescue equipment
- personal hygiene protocols
- principles of suspension trauma
- reconnaissance techniques
- relevant legislation
- relevant occupational health and safety (OH&S) principles and practices
- safe working loads of equipment
- safety factors and safe working loads
- signs and symptoms of operational stress
- vertical rescue concepts and practices
- voice, whistle and other communication systems

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to:

- establish safe systems to gain access to and recover casualties
- extricate casualty minimising further injury or discomfort while conducting rescue operation
- apply safe work practices

Consistency in performance

Competency should be demonstrated over time in a range of actual and/or simulated workplace environments.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in an industry-approved simulated and/or workplace environment involving vertical rescues using a range of equipment.

Specific resources for assessment

Access is required to:

- an appropriate venue for vertical rescue activities
- organisational vertical rescue equipment and personnel for team-based activities

Method of assessment

This unit may be assessed with the following unit:

- PUATEA002B Work autonomously

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an industry-approved simulated work environment. Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors

- written or oral questions

Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

Operation and task

information may include:

- access and egress routes
- clearly defining team roles (team leader, safety officer, technicians)
- command, control and coordination arrangements
- location
- magnitude and type of incident
- number and type of casualties
- other organisations
- potential hazards
- weather conditions and forecasts

Sources may include:

- pager
- people on scene
- public
- other organisations

Vertical rescue equipment

may include:

- anchors
- ascending and descending devices
- binoculars
- edge management devices
- edge protection
- karabiners
- lighting and generator
- pulleys
- rescue rope to AS 4142.3-1993 Fibre ropes – Man-made fibre rope for static life rescue lines; AS 4143.6-1996 Methods of test for fibre ropes – Resistance to abrasion; AS/NZS 1891 Industrial fall-arrest systems and devices
- slings
- specialist communications equipment
- stretchers
- tapes

Scene management

procedures may include:

- establishing and monitoring safety zones
- establishing barriers and perimeter access controls
- liaising with the media
- managing bystanders and media
- preserving the crime scene

Preserving the incident scene
must include:

- disturbing only to gain access or make scene safe
- not disturbing fatality scenes until police investigation activities are completed
- preserving integrity of evidence

Physical and environmental features may include:

- air quality
- anchor points
- cold rain
- clearances
- exhaust or steam outlets
- exposed or hazardous electrical conductors
- exposed unprotected edges
- fuels and chemicals
- greasy or oily surfaces
- ground stability
- high winds
- hot and/or humid conditions
- hot surfaces
- irrespirable atmospheres
- loud noises
- low light environments
- moving machinery
- physical features such as slopes:
- loose surfaces
- sheer face
- overhangs
- snow and ice
- swift water
- tides/waves/surf movements
- unstable structures

Operational environments
may include:

- man-made such as tower structures, mines and shafts
- natural such as trees, cliffs, caves

Systems may include:

- edge management
- hauling
- high line or tyrolean
- lowering

Vertical rescue techniques
will be determined by:

- organisational policy and procedures
- type of vertical rescue system adopted

Operational documentation
may include:

- equipment running logs
- notes
- organisational procedures and related legal

- requirements
- sketches
- vehicle logs

Unit Sector(s)

Not applicable.