



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **PUASAR026A Undertake industrial and domestic rescue**

**Revision Number: 1**

## PUASAR026A Undertake industrial and domestic rescue

### Modification History

Not applicable.

### Unit Descriptor

#### Unit Descriptor

This unit covers the competency required to gain access to and extricate entrapped casualty/s from a range of industrial and/or domestic incidents while minimising the potential for further injury and preserving the integrity of evidence.

An industrial rescue involves the safe removal of persons who have had an accident in the workplace such as factories, warehouses and building sites. It involves disentanglement from machinery, and extrication from heavy machinery such as cranes. Rescue of occupants trapped in elevators and escalators is also included.

Domestic rescue involves the rescue of occupants trapped in household settings. This includes such things as children with fingers in drain plugs, removal of rings, and persons who are physically incapable of removing themselves from their houses due to ill health.

This unit requires the responder to access entrapped casualties using a range of techniques and to operate specialist equipment to undertake the rescue.

### Application of the Unit

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This unit typically applies to a member of a rescue team.

This unit may be customised to suit a range of industrial and/or domestic incidents based on an organisational risk profile.

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Pre-requisite Unit/s Nil

## Employability Skills Information

Employability Skills 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 Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

### ELEMENT

1. Prepare for industrial/domestic rescue

### PERFORMANCE CRITERIA

- 1.1 *Operation and task information* is obtained and assessed upon call out to *domestic or industrial rescue incident*
- 1.2 Based on incident information, appropriate *rescue resources* are identified, selected, received and checked to ensure they are ready for use
- 1.3 *Personal protective equipment (PPE) and clothing* are selected based on type of industrial or domestic equipment involved
- 1.4 *Systematic approach* to identifying *potential hazards and associated risks* is undertaken en route and on approach to the incident

**ELEMENT****PERFORMANCE CRITERIA****2. Establish and maintain rescue scene safety**

- 2.1 **Communication** and ongoing liaison with heavy vehicle rescue team members on site is established
- 2.2 Liaison with **other relevant personnel** is established and maintained
- 2.3 **Rescue scene reconnaissance** and size up is conducted
- 2.4 **Situational** and **environmental hazards** are identified, analysed, evaluated and **treated**, marked and monitored
- 2.5 Rescue team is positioned taking into account **potential dangers**, requirements for personnel and vehicles to **access the scene**, and **limitations of operating equipment**
- 2.6 Safe work area is established to protect casualties, emergency services personnel and members of the public
- 2.7 Preventative action is taken to minimise the risk of fire or other potential hazards, where required
- 2.8 **Impact effects on occupancy areas** and **potential effects on casualties** are assessed
- 2.9 Techniques and equipment are employed to **stabilise the occupancy area** and to make the incident site safe
- 2.10 Scene lighting is established to reduce hazards associated with the type of incident
- 2.11 Specialist rescue resources are accessed based on an assessment of the incident

**ELEMENT****PERFORMANCE CRITERIA****3. Manage casualties**

- 3.1 *Hygiene precautions* are implemented in accordance with organisational requirements
- 3.2 Techniques and equipment are used to *gain access to entrapped casualties* within the occupancy area/s
- 3.3 *Primary survey* of casualty is undertaken to determine injury type and severity
- 3.4 Injuries are confirmed that may complicate removal of casualty from the occupancy area and appropriate action is taken
- 3.5 In the event of multiple casualties, triage assessment is undertaken to determine priorities for medical treatment and for extrication
- 3.6 Need for additional personnel and/or specialist equipment is requested
- 3.7 Support is provided to medical personnel assisting with the treatment of the entrapped person/s as required

**4. Extricate casualty/s**

- 4.1 Casualty/s are protected from injury during extrication
- 4.2 *Treatment of located casualty/s* is undertaken in consultation with medical personnel and in accordance with organisational policies
- 4.3 Access plans are determined with consultation team leader, medical staff and other technical specialists
- 4.4 Rescue techniques and equipment used by the rescue team take into account the features of the occupancy area including materials and design elements that may impact on the extrication
- 4.5 Casualty/s are *removed* using recognised techniques and equipment

**ELEMENT****PERFORMANCE CRITERIA****5. Carry out rescue operations**

- 5.1 Liaison is undertaken with primary response team and other relevant personnel
- 5.2 Additional technical equipment is employed to make incident scene safe
- 5.3 Procedures are implemented to protect casualty/s from further injury or discomfort during access and removal
- 5.4 Access path is provided for the removal of casualty/s using appropriate rescue techniques and equipment
- 5.5 Scene is *preserved* for investigating officer/s

**6. Conclude rescue operations**

- 6.1 Equipment is *recovered, cleaned and serviced* according to manufacturers' guidelines and organisational standards
- 6.2 *Signs and symptoms of operational stress* in self and others are reported to relevant personnel
- 6.3 Operational *debrief* is attended and *documentation* is completed to organisational standards
- 6.4 *Exposure records* are completed

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required Skills

- communication
- conduct a primary survey
- decision making
- extricate casualties safely
- identify symptoms of physical/emotional stress
- solve problems
- use rescue equipment
- wear PPE and clothing in accordance with organisational requirements
- work within the organisation's command and control structure

#### Required Knowledge

- available equipment and equipment function
- emergency care
- hygiene procedures
- manufacturer's operational guidelines
- operate rescue equipment
- organisational policies and procedures (such as relevant legislation; operational, corporate and strategic plans; operational performance standards; operational policies and procedures; organisational personnel and occupational health and safety practices and guidelines; organisational quality standards; organisation's approach to environmental management and sustainability)
- primary survey procedures
- relevant legislation
- relevant occupational health and safety (OH&S) principles and practices
- rescue equipment
- safe work practices
- scene assessment procedures
- situational awareness
- symptoms of physical/emotional stress
- use of personal protective equipment



## **Evidence Guide**

Not applicable.

## Range Statement

### 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**

Availability of company personnel to provide technical advice  
 Environmental and other hazards  
 Incident location  
 Other public safety organisations at the scene or en route  
 Time of day and traffic density  
 Type of rescue and number of casualties  
 Type of machinery or household item involved

#### **Domestic or industrial rescue may include**

Domestic rescue  
 children with fingers in drain plugs  
 removal of rings  
 persons who are physically incapable of removing themselves from their houses due to ill health  
 Industrial rescue  
 agricultural machinery  
 disentanglement from machinery located in factories, warehouses and building sites  
 elevators/escalators  
 industrial/construction incidents  
 industrial machinery entrapments  
 occupant/s trapped in elevators and escalators  
 shipping containers

#### **Rescue resources may include**

Ancillary equipment such as stretchers  
 Firefighting equipment  
 Hand tools  
 Hot cutting equipment  
 Lifting and hauling equipment  
 Lighting equipment

**RANGE STATEMENT**

	Pneumatic hydraulic mechanical electrical tools
	Patient protection equipment
	Rescue units and stowed equipment
	Tool boxes
<b>Personal protective equipment and clothing may include</b>	Boots
	Eye protection
	Gloves
	Hearing protection
	Helmet
	Knee/elbow protection
<b>Systematic approach must include</b>	Assessment i.e. call out and response, route, scene, liaison, casualties
	Positioning of vehicle i.e. dangers, access and casualties
	Procedures i.e. dangers, casualty protection, extrication, warning devices and lighting
<b>Potential hazards and associated risks may include</b>	Moving machinery
	Electrocution
	Industrial traffic (forklifts etc.)
	Various industrial work environments
<b>Communication may include</b>	Radio communications (radio, telephones and information technology)
	Warning signals
<b>Other relevant personnel may include</b>	Ambulance officers
	Company personnel
	Emergency services personnel
	Household occupants
	Police
	Utility technicians
<b>Rescue scene reconnaissance may include</b>	Collecting relevant information about casualty/s and hazards
	Isolating and eliminating utilities
	Surveying the incident scene

**RANGE STATEMENT****Situational and environmental hazards may include**

Adverse weather  
 Biological hazards such as body fluids and tissue  
 Convergence  
 Dangerous goods and hazardous substances  
 Difficult terrain  
 Dusts  
 Electrical and mechanical moving machinery  
 Electricity  
 Equipment power/drive systems  
 Gas  
 Mobile property  
 Sharp and jagged objects  
 Slippery surfaces  
 Vehicle fuel systems  
 Water and sewerage utilities

**Treating hazards may include**

Eliminating the hazard  
 Isolating the area/source  
 Stabilising overhead hazards  
 Using atmospheric monitoring equipment  
 Using PPE and clothing

**Potential dangers may include**

Electrical hazards  
 Fuel  
 Stability and location of machinery

**Accessing the scene may include**

- Allowing clear access and egress for other responding vehicles and ambulances

Establishing a clear area to manoeuvre personnel, stretchers

**Limitations of operating equipment may include**

- Access to incident site
- Equipment capacities and limitations

**Impact effects on occupancy areas may include**

Disconnection of essential services

**RANGE STATEMENT**

<b>Potential effects on casualty may include</b>	Confinement without entrapment (elevators) Limb entrapment
<b>Stabilising the occupancy area may include</b>	Isolating utilities (power, gas, water etc.) Meshing gears on machinery
<b>Hygiene precautions may include</b>	<ul style="list-style-type: none"> <li>• Avoiding contact with body fluids and tissue</li> <li>• Decontaminating equipment at scene and placing protective clothing and gloves in a sealed bag for special dry cleaning</li> <li>• Using correct personal protective clothing and equipment</li> <li>• Using surgical gloves under protective work gloves</li> <li>• Washing hands</li> <li>• Wearing appropriate protective clothing</li> </ul>
<b>Gaining access to entrapped casualty/s may include</b>	<ul style="list-style-type: none"> <li>• Accessing elevator shaft</li> <li>• Disassembling of machinery</li> <li>• Managing moving machinery</li> <li>• Managing utilities supplies</li> <li>• Removing domestic plumbing equipment</li> </ul>
<b>Primary survey</b>	<ul style="list-style-type: none"> <li>• Is a methodical process used to quickly identify immediate life threatening injuries and conditions that require intervention</li> <li>• Should be completed promptly upon initial patient contact if no immediate life threatening injuries and conditions requiring intervention are found during the survey</li> <li>• Should be completed as soon as possible if it is interrupted</li> </ul> <p>Should only be interrupted when:</p> <ul style="list-style-type: none"> <li>• life threatening condition is identified and immediate life saving interventions are initiated</li> <li>• scene conditions require that the patient be moved immediately due to danger to first emergency care responders or the patient</li> </ul>
<b>Treating located casualty/s may include</b>	First aid
<b>Removing casualty/s may include</b>	Rescue/spine boards Stretchers Team stretcher handling

**RANGE STATEMENT****Preserving the scene may include**

Defining and redefining scene boundary  
 Preserving evidence and related legal requirements  
 Securing the scene

**Recovering, cleaning and servicing of equipment may include**

- Contaminated clothing and equipment cleaned or disposed
- Equipment inspected for damage and serviceability
- Inventories checked

**Signs and symptoms of operational stress may include**

Critical incident stress  
 Dehydration  
 Fatigue  
 Hypothermia

**Debriefings may include**

Critical incident stress debriefing  
 Operational analysis  
 Post-incident analysis  
 Performance evaluations

**Documentation may include**

AIRS/coroner report  
 Near miss injury report  
 Notebooks completed  
 Operational debrief  
 Post operational analysis

**Exposure records may include**

- Reporting form that documents any exposure that may result in a short- or long-term associated injury such as:
- hazardous substances, such as dust, vapours, fumes, radiation and chemical substances
- heavy repetitive work over long periods of time
- lifting heavy loads
- noise
- psycho-social hazards (e.g. critical incident stress)

**Unit Sector(s)**

Not applicable.

