



**Australian Government**

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

# **HLTHY401C Prepare multi-place hyperbaric chamber**

**Release: 1**

## **HLTHY401C Prepare multi-place hyperbaric chamber**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Descriptor**

This unit of competency describes the skills and knowledge required to prepare a multi-place hyperbaric chamber for safe operation

### **Application of the Unit**

#### **Application**

Work will be performed within a prescribed range of functions involving routine and non-routine methods and procedures which require the exercise of some discretion and judgement

Compliance with industry standards and guidelines

All activities are carried out in accordance with organisation policies, procedures and infection control guidelines

### **Licensing/Regulatory Information**

Not Applicable

### **Pre-Requisites**

Not Applicable

## Employability Skills Information

### Employability Skills

This unit contains Employability Skills

## Elements and Performance Criteria Pre-Content

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in italics are elaborated in the Range Statement.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

1. Prepare chamber for compression

- 1.1 Complete pre-compression checklist in accordance with organisation policies and procedures
- 1.2 Check that the chamber compartment is clean and free from flammable items
- 1.3 Check that the chamber components are in working order/serviceable
- 1.4 Check that the chamber valve alignment is correct
- 1.5 Ensure waste disposal system is in working order
- 1.6 Complete user maintenance in accordance with organisation policies and procedures and maintenance schedule

2. Establish power supply to panel and chamber

- 2.1 Ensure lighting to chamber is in working order
- 2.2 Ensure gas analysers are operating
- 2.3 Check that auxiliary power supply is available
- 2.4 Ensure alarm indicators are switched on and in working order
- 2.5 Ensure closed circuit TV systems are switched on and in working order
- 2.6 Ensure communications systems are functioning correctly

**ELEMENT****PERFORMANCE CRITERIA**

- |  |  |
|--|--|
| 3. Establish <i>gas supply</i> to chamber                | 3.1 Check that primary treatment gas is available<br>3.2 Ensure sufficient gas is available to complete treatment<br>3.3 Ensure treatment gas is supplied to chamber<br>3.4 Check to ensure secondary gas supplies are on-line<br>3.5 Ensure air compressors are operational   |
| 4. Select <i>equipment and materials</i> for compression | 4.1 Ensure that equipment and materials selected are correct, cleaned and prepared<br>4.2 Check that equipment and materials selected are in working order<br>4.3 Identify and label faulty equipment<br>4.4 Complete documentation in accordance with organisation policies and procedures<br>4.5 Complete equipment repair in accordance with organisation policies and procedures and manufacturer's instructions |
| 5. Prepare chamber <i>occupants</i> for compression      | 5.1 Discuss treatment plan with attendance prior to the procedure<br>5.2 Check that the attendant's qualifications and fitness to dive<br>5.3 Ensure chamber occupants are wearing non-flammable clothing/items  |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### *Essential knowledge:*

The candidate must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes knowledge of:

- Contraindications for attendants and clients undergoing compression
- Correct valve alignment on chamber and control panel, compressors and storage cylinders
- Function of a compression chamber
- Function of electrical and communication systems
- Function of gas analysing systems
- Function of valves and regulators
- Key elements to prepare a compression chamber
- Legal and regulatory requirements
- Medical terminology related to clients who may be undergoing compression relevant to preparing a compression chamber for operation
- Operational procedures relating to compression chambers
- Pathophysiology and the interrelationship with compression and decompression relevant to operating a compression chamber
- Relevance of operational test on all equipment
- Safety procedures/actions in event of an emergency related to compression chambers
- Systems diagrams

#### *Essential skills:*

It is critical that the candidate demonstrate the ability to:

- Comply with industry standards and guidelines
- Comply with organisation policies and procedures including those of OHS and infection control
- Safely prepare the hyperbaric chamber

## REQUIRED SKILLS AND KNOWLEDGE

- Identify and respond correctly to contraindications for compression before compression commences
- Identify the steps that must be taken to ensure that equipment is safe

In addition, the candidate must be able to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes the ability to:

- Apply confidentiality requirements in relation to client information
- Communicate with people from diverse cultural and linguistic backgrounds
- Deal with conflict
- Interpret gas systems diagrams
- Operate all compression chamber systems
- Operate the built in breathing system
- Prepare a compression chamber safely
- Solve problems including an ability to use available resources
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues, including appropriate practices to ensure efficient use of resources
- Use numeracy skills ranging from the ability to complete basic arithmetic calculations, recording stock levels and statistical information
- Use oral communication skills required to fulfil job roles in a safe manner and as specified by the organisation, including skills in:
  - asking questions
  - providing clear information
  - listening to and understanding workplace instructions
  - clarifying workplace instructions when necessary
  - effective verbal and non verbal communication with a range of internal and external persons
  - competence in English or a community language, depending on client group and organisation requirements
- Use reading and writing skills required to fulfil job roles in a safe manner and as specified by the organisation at a level of skill required for reading and documenting technical information and understanding complex policy and procedure manuals
- Work with others and display empathy with clients and relatives

## Evidence Guide

## 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 this competency unit:*

- The individual being assessed must provide evidence of specified essential knowledge as well as skills
- Where, for reasons of safety, space, or access to equipment and resources, assessment takes place away from the workplace, the assessment environment should represent workplace conditions as closely as possible
- Consistency of performance should be demonstrated over the required range of situations relevant to the workplace

*Context of and specific resources for assessment:*

- Evidence of compliance with industry standards and guidelines
- Relevant organisation policy, guidelines, procedures and protocols

## EVIDENCE GUIDE

### *Method of assessment:*

- Clinical skills involving direct client care are to be assessed initially in a simulated clinical setting (laboratory). If successful, a second assessment is to be conducted during workplace application under direct supervision
- Observation of work activities when preparing a multi-place hyperbaric chamber
- Observation of simulation and/or role play when preparing a multi-place hyperbaric chamber
- Discussion of physical and/or behavioural contingency scenarios involving duty of care
- Authenticated transcripts of relevant education/training courses
- Recognition of relevant life/work experience
- Questioning, written assessments/projects, e-learning can be used to assess knowledge
- Authenticated reports of experience in preparing multi-place hyperbaric chamber (Documentation associated with performance reviews, supervisor/co-ordinator evaluations of work performance)
- Training records associated with First Aid, OH Safety training, Orientation/Induction Training, Safe Manual Handling, Universal infection control procedures
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice

### *Access and equity considerations:*

- All workers in the health industry should be aware of access and equity issues in relation to their own area of work
- All workers should develop their ability to work in a culturally diverse environment
- In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on health of Aboriginal and Torres Strait Islander people
- Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on health of Aboriginal and/or Torres Strait Islander clients and communities



## EVIDENCE GUIDE

### *Related units:*

This unit should be assessed in conjunction with the following units:

- HLTHY402C Operate multi-place hyperbaric chamber
- HLTHY403C Conduct post compression routines
- HLTHY404C Implement emergency procedures for hyperbaric chambers

This unit can be assessed independently, however holistic assessment practice with other health services units of competency is encouraged

## 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. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

### *Pre-compression checklist may include:*

- Inspect panel
- Communications systems
- Emergency systems
- Environmental conditioning system

### *Flammable items may include:*

- Newspapers
- Magazines
- Dirt
- Maintenance cloths
- Non-cotton clothing
- Plastics
- Other non metal items

**RANGE STATEMENT**

- Gas analysers must include:*
- Oxygen
  - Carbon-dioxide
- Auxiliary power may include:*
- Generator
  - Battery
  - Uninterrupted power supply
- Alarm indicators may include:*
- Low pressure gas supply
  - High/low oxygen environment
  - High/low carbon dioxide environment
  - Power supply alarms
  - Fire
  - Fire deluge water levels/supply
  - Uninterrupted power supply
- Correct gas may include:*
- Air
  - Oxygen
  - Gas mixtures eg helium/oxygen
- Secondary gas supply may include:*
- Bulk storage
  - Secondary compressor
- Equipment and materials must include:*
- Communications equipment for inside chamber
  - Multi-place hyperbaric chamber
  - Client monitoring equipment
  - Client ventilator
  - Intravenous infusion equipment
  - Client hoods/built in breathing system
  - Fire fighting equipment
  - First aid kit
- Equipment and materials may include:*
- Seating and bedding for chamber

**RANGE STATEMENT***Treatment plan may include:*

- Treatment table i.e. dive treatment
- Client treatment history eg previous treatments and response to these
- Attendant surface intervals
- Occupant requirements eg food

*Attendants:*

- Inside nurse
- Outside nurse

**Unit Sector(s)**

Not Applicable