



Australian Government

**Assessment Requirements for HLTENN027
Apply nursing practice in the hyperbaric
environment**

Release: 1

Assessment Requirements for HLTENN027 Apply nursing practice in the hyperbaric environment

Modification History

Release	Comments
Release 1	<p>This version was released in <i>HLT Health Training Package release 3.0</i> and meets the requirements of the 2012 Standards for Training Packages.</p> <p>Significant changes to the elements and performance criteria. New evidence requirements for assessment, including volume and frequency requirements. Minimal change to knowledge evidence.</p> <p>Supersedes HLTEN613B</p>

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- undertaken nursing work in accordance with Nursing and Midwifery Board of Australia professional practice standards, codes and guidelines
- performed nursing interventions for 3 different people undergoing a session of hyperbaric therapy in the workplace.

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- applicable Australian Standards for work in compressed air and hyperbaric oxygen facilities
- basic structure and internal layout of a hyperbaric chamber
- common dive tables for hyperbaric treatment and their indications
- common treatment profiles for hyperbaric therapy and their indications
- conditions indicated and contraindicated for hyperbaric therapy treatment and the mechanisms of therapeutic benefit for each
- educational resources and professional organisations associated with hyperbaric therapy
- emergencies associated with the hyperbaric chamber and treatment including:
 - fire inside the chamber

- fire outside the chamber
- emergency decompression
- explosive decompression
- uncontrolled compression
- power failure
- communication failure
- chamber atmospheric contamination
- isolation emergency including actual or potential violence
- pneumothorax
- cardiac arrest and airway management
- hypoglycaemia
- oxygen toxicity (central nervous system and pulmonary)
- hyperbaric chamber treatment including:
 - the chamber and sequence of events that occur during a treatment
 - how to observe air equalisation techniques
 - strategies for managing an anxious patient during hyperbaric treatment
 - prohibited items in the chamber
 - appropriate clothing for treatments
 - potential complications
 - location of main oxygen valve and how to shut it off when required
 - how to maintain hyperbaric chamber cleanliness
 - emergency procedures for fire and medical emergencies
- symptoms of hyperbaric CNS toxicity and appropriate actions in response to the symptoms
- indications for hyperbaric therapy including:
 - decompression sickness
 - carbon monoxide poisoning
 - smoke inhalation
 - osteoradionecrosis
 - selected wound healing
 - mixed non aerobic and aerobic infections
 - air or gas embolism
 - osteomyelitis (refractory)
 - gas gangrene (clostridial myonecrosis)
 - soft tissue radionecrosis
 - crush injuries/compartment syndromes
 - compromised skin grafts/flaps
 - thermal burns
 - blood loss
 - some spider bites

- legislative requirements for practice
- potential complications of hyperbaric therapy including:
 - cardiac arrest and airway management
 - hypoglycaemia
 - oxygen toxicity (central nervous system and pulmonary)
 - isolation emergency including actual or potential violence
 - pneumothorax
 - claustrophobia
 - sinus or dental barotrauma
 - lung barotrauma
- physiological effects of increased atmospheric pressure on the human body and of breathing 100 per cent oxygen (hyper oxygenation), helium or mixed gases under hyperbaric conditions
- rationale for annual staff hyperbaric medicals
- contraindications for hyperbaric therapy including:
 - pulmonary function tests
 - tissue perfusion tests
 - excessive alcohol intake
 - dehydration
 - asthma
 - anxiety states or claustrophobia
 - dental work in the previous 24 hours
 - strenuous exercise before (and after) therapy
 - flying within 24 hours of treatment (staff and water divers only)
- anatomy, physiology and pathophysiology related to hyperbaric issues, sufficiently in-depth and specialised to make considered judgements and to make professional contributions to hyperbaric nursing care
- specific procedures for identifying people with diabetes and others who have a pre-procedure blood sugar outside normal range
- special considerations for children, infants and babies
- theories of physics as they relate to hyperbaric treatments including:
 - Boyle's law
 - Charles's law
 - Henry's law
 - Dalton's law.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources in line with the Australian Nursing and Midwifery Accreditation Council's Standards
- modelling of industry operating conditions including access to real people for simulations and scenarios in enrolled nursing work.

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

In addition, assessors must hold current registration as a Registered Nurse with Nursing and Midwifery Board of Australia.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c3d1390f-48d9-4ab0-bd50-b015e5485705>