



Australian Government

Department of Education, Employment and Workplace Relations

HLTMS207D Handle medical gases safely

Release: 1

HLTMS207D Handle medical gases safely

Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTMS207C Handle medical gases safely	HLTMS207D Handle medical gases safely	ISC upgrade changes to remove references to old OHS legislation and replace with references to new WHS legislation. No change to competency outcome.

Unit Descriptor

Descriptor

This unit describes the skills and knowledge required to handle medical gas equipment in a safe manner within the health care environment

Application of the Unit

Application

The unit may apply to a variety of work roles involving working with medical gases

Work is often performed under limited supervision and generally within a team environment

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 for use of medical gas and equipment

- 1.1 Review work sheets to determine medical gas handling requirements
- 1.2 Select equipment required for medical gas handling appropriate for the size of cylinder and work tasks
- 1.3 Organise and set up work areas to ensure safe, effective and efficient handling of medical gas equipment in accordance with workplace requirements and relevant legislation
- 1.4 Inspect *medical gas equipment* to ensure cleanliness of all components, including yoke, manifold or regulator
- 1.5 Identify potential *risks and hazards* to work and manage according to job requirements, in accordance with workplace requirements, work health and safety (WHS) and other relevant legislation
- 1.6 Follow workplace procedures for reporting identified risks
- 1.7 Select emergency and *personal protective equipment* and fit in accordance with job requirements, manufacturers' specifications, workplace requirements and relevant legislation
- 1.8 Fit and test bottles and regulators in accordance with workplace policies and procedures and relevant legislation

ELEMENT**PERFORMANCE CRITERIA**

2. Handle medical gas equipment appropriately and safely

- 2.1 Handle medical gas cylinders and related equipment with care, and position according to manufacturers' recommendations
- 2.2 Select appropriate trolley size and type for the movement of cylinders
- 2.3 Correctly restrain cylinders for transport
- 2.4 Select appropriate regulators for use with cylinder
- 2.5 Close valves prior to transport
- 2.6 Close cylinder valves and release regulator pressure after use
- 2.7 Monitor gas pipeline and manifold systems in accordance with relevant legislation and workplace requirements
- 2.8 Replace empty bottles and banks as soon as exhausted and in accordance with workplace policies and procedures
- 2.9 Open cylinder valves on manifold banks in accordance with manufacturer's and organisation policy, and whether they are manual or automatic
- 2.10 Ensure only trained and authorised personnel handle medical gas equipment
- 2.11 Use personal protective equipment and recommended precautions appropriately when handling medical gas equipment

ELEMENT**PERFORMANCE CRITERIA**

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| 3. Storing medical gas cylinders and equipment appropriately | 3.1 Store all cylinders and equipment in appropriate storage locations in accordance with organisation policies and manufacturers recommendations |
| | 3.2 Store cylinders away from combustible material |
| | 3.3 Use cylinder stock on a rotational system and keep full and empty cylinders separate |
| | 3.4 Protect cylinders from cold and heat |
| | 3.5 Enclose and secure storage area according to workplace requirements and relevant legislation |
| | 3.6 Display appropriate and clearly visible signage outside medical gas storage area |

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:

- Cylinder identification
- Emergency response procedures
- Gas types
- WHS requirements
- Potential risks and hazards to gas equipment use
- Relevant industry standards
- Relevant legislation
- Storage and handling requirements
- Transportation requirements
- Workplace gas use policies
- Workplace requirements

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Appropriately interpret job requirements
- Organise work areas and medical gas equipment
- Select appropriate emergency and personal protective equipment
- Identify potential risks, hazards to handling and storage of medical gas equipment
- Use all medical gas equipment safely and appropriately

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 materials handling skills
- Communicate effectively, including:

- clear labelling
- following instructions
- giving information
- interpersonal
- listening
- questioning
- Identify cylinder, regulator and valve types
- Identify gas handling non conformances
- Identify gas/types/characteristics
- Methodically organise work
- Operate equipment
- Organise equipment availability
- Read and interpret work requirements
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues, including appropriate practices to ensure efficient use of resources
- Use emergency and personal protective equipment
- Use safe and efficient work practices

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
- This unit is most appropriately assessed in the workplace or in a simulated workplace and under the normal range of workplace conditions
- Reassessment to accommodate changing workplace requirements and in accordance with the policies of the organisation

Method of assessment:

- Assessment may include observations, questioning and evidence gathered from the workplace environment
- Assessment may require a variety gas equipment that reflect different needs within the work environment
- Assessment may be conducted on one occasion but should include normal range of workplace activities
- Regular assessment of manual handling implications should be carried out on all tasks, particularly when:
 - introduced
 - changed
 - new personnel are inducted

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

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.

Medical gas equipment may include:

- Gas cylinders
- Regulators
- Manifolds
- Gas valves
- Gas monitoring and alarm systems
- Piping systems
- Warning signs
- Transport trolleys

Gas types may include:

- Medical air
- Tool air
- Medical oxygen
- Nitrous oxide
- Carbon dioxide

Potential risks and hazards include, but are not limited to:

- Risks and hazards that could lead to injury or illness of employees, contractors, visitors or the public
- Damage to plant, vehicles or property
- Manual handling
- Explosion
- Gases and fumes

Emergency and personal protective equipment may include:

- Gloves
- Eye protection
- Appropriate footwear
- Fire extinguisher
- Emergency Procedures Guide
- Material Safety Data Sheet information
- Face shield or mask
- Hearing protection

Supervisor may be:

- Nominated personnel
- WHS Representative

Work instructions may be:

- Given verbally
- Written
- In English
- In community language
- Provided visually on video, instructions sheets

Workplace procedures may include:

- Gas storage, transport and handling procedures
- Quality activities
- Team meetings
- Incident notification
- Work performance requirements

Unit Sector(s)

Not Applicable