



Australian Government

Department of Education, Employment and Workplace Relations

HLTPAT302D Assist with microbiology testing

Release: 1

HLTPAT302D Assist with microbiology testing

Modification History

HLT07 Version 4	HLT07 Version 7	Comment
HLTPAT302C Assist with microbiology testing	HLTPAT302D - Assist with microbiology testing	Unit updated in V5. 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 of competency describes the skills and knowledge required to assist with the preparation of specimens for analysis

Application of the Unit

Application

Work performed requires a range of well-developed skills where some discretion and judgment is required. Individuals will take responsibility for their own outputs and limited responsibility for the output of others

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 to assist with microbiology testing

- 1.1 Confirm requirements for assisting with microbiology testing with scientist
- 1.2 Prepare media preparation, agar plates, broth, sterile solutions in accordance with organisation policies and procedures

2. Prepare *specimens* for analysis

- 2.1 Prepare specimens in accordance with organisation policies and procedures
- 2.2 Process specimens by plating onto *designated media*
- 2.3 Conduct tests in accordance with instructions
- 2.4 Seek clarification/feedback from scientist as required
- 2.5 Follow infection control guidelines throughout procedure

ELEMENT

3. Maintain a clean work environment

PERFORMANCE CRITERIA

- 3.1 Clean autoclave and laboratory equipment in accordance with laboratory guidelines
- 3.2 Sterilise instruments as required
- 3.3 Dispose of contaminated waste in accordance with infection control protocols
- 3.4 Store chemicals in accordance with organisation policies and procedures

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:

- Autoclave, laminar flow system
- Basic microbiology
- Biohazard nature of specimens handled in the laboratory
- Infection control requirements
- Laboratory policy and procedure manual
- Medical terminology
- WHS requirements

Essential skills:

It is critical that the candidate demonstrate the ability 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:

- Assist and prepare specimens for analysis
- Comply with relevant policies, protocols, guidelines and procedures of the organisation
- Effectively communicate with internal and external customers
- Follow instructions
- Handle of hazardous chemicals
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues
- Use basic computer skills
- Use numeracy skills ranging from the ability to complete basic arithmetic calculations such as addition, subtraction, multiplication, division to recording numbers
- Use oral communication skills and language competence 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
- literacy in English or community language, depending on client group and organisations requirements
- Use problem solving skills including ability to use available resources
- 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 may range from the ability to understand symbols used in WHS signs, to reading workplace safety pamphlets or procedure manuals, to reading labels and handling chemicals
- Use literacy support available in the workplace that may range from having access to support or assistance from expert/mentor/supervisor, to having no communication supports available
- Use time management strategies to set priorities

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
- Observation of workplace performance is essential for assessment of this unit
- Consistency of performance should be demonstrated over the required range of situations relevant to the workplace
- A diversity of assessment tasks is essential for holistic assessment
- 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

Context of and specific resources for assessment:

- Equipment
- Laboratory policy and procedure manual
- Work health and safety (WHS) requirements
- Infection control manual

Method of assessment

- Observation in the work place (if possible)
- Written assignments/projects or questioning should be used to assess knowledge
- Oral questioning
- Computer aided assessment
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice
- 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

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

Related units:

- This unit can be delivered and assessed independently, however holistic assessment practice with other pathology 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.

Specimens may include:

- Blood
- Cultures
- Urine
- Faeces
- Swabs
- Tissue samples
- Sputum
- Body fluids
- CSF pleural aspirates

Simple reagents and apparatus may include:

- Media preparation
- Agar plates
- Broth
- Sterile solutions

Equipment may include:

- Staining machines
- Tissue homogeniser
- Biohazard cabinet
- Centrifuge
- Incubator

RANGE STATEMENT*Designated media to include:*

- Blood agar
- Macconkey agar
- Chocolate agar
- Anaerobic agar
- Other specialised agar

Tests to include:

- Microscopy and culture
- Staining

Unit Sector(s)

Not Applicable