



Australian Government

Department of Education, Employment and Workplace Relations

HLTPAT419C Perform Pathology Tests

Release: 1

HLTPAT419C Perform Pathology Tests

Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTPAT419B Perform pathology tests	HLTPAT419C - Perform pathology tests	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 by workers in pathology laboratories who perform duties that reflect an understanding of the structure and profile of the industry, the roles and relationships within and across the industry and key issues facing the industry.

Application of the Unit

Application

The application of knowledge and skills described in this competency unit may relate to functions necessary for working within a pathology laboratory.

Work at this level may be undertaken independently or under guidance and/or supervision.

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 undertake basic pathology tests

- 1.1 Ensure the specimen is appropriate for the test requested
- 1.2 Prepare environment for undertaking tests
- 1.3 Prepare *equipment, solutions and agar plates* and samples in accordance with organisation policies and procedures
- 1.4 Use *personal protective equipment* in accordance with workplace health and safety policies

ELEMENT**PERFORMANCE CRITERIA****2. Perform handling or basic testing of samples**

- 2.1 Accept or reject specimens based on identification, and specimen quality in accordance with *organisation policies and procedures*
- 2.2 Identify *specimen additives* (anticoagulants etc) and select appropriate specimens based on additives
- 2.3 Adopt *recommended safety precautions* when handling biologically hazardous specimens.
- 2.4 Use *correct techniques to separate samples* for testing
- 2.5 Use *recommended techniques* to prepare samples for testing
- 2.6 Set up and complete *basic tests* and quality control procedures
- 2.7 Prioritise specimen processing based on clinical history provided
- 2.8 Take steps maximise test accuracy, validity and reliability
- 2.9 Conduct a re-test if test or quality control results are unreliable

3. Document results

- 3.1 *Document test and control results* in recognised format.
- 3.2 Recognise the importance of quality control
- 3.3 Maintain confidentiality of client information

4. Maintain environment

- 4.1 Clean and store equipment in accordance with laboratory guidelines
- 4.2 Sterilise equipment as required
- 4.3 Dispose of contaminated waster in accordance with infection control protocols and legislative and regulatory requirements
- 4.4 Store chemicals in accordance with organisation policies and procedures
- 4.5 Clean and disinfect work 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:

- Biohazard nature of specimens handled in the laboratory
- Infection control within a pathology laboratory
- Laboratory precautions for handling biological materials
- WHS requirements
- Procedures involved in referral to another laboratory
- Specimen acceptance and rejection criteria
- Specimen additives (anticoagulants etc)
- Terminology used within a pathology laboratory
- Tests performed in a pathology laboratory
- The different modes of practice including small and large laboratories
- The relationships between the various occupations within the pathology industry
- The roles of professionals within the pathology industry

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:

- Comply with relevant policies, protocols, guidelines and procedures of the organisation
- Effectively communicate with internal and external clients
- Follow instructions
- Handle of hazardous chemicals
- Identify the range of pathology tests and their importance for client welfare
- Identify, prioritise and prepare samples according to sample type and/or clinical data
- Perform basic tests within the scope of the laboratory (This may include point-of care or bed side testing of samples)
- Practise effective communication
- Prepare specimens for analysis

- Recognise the need for performing and recording quality controls within the scope of the performed tests
- 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 organisations requirements
- Use problem solving skills required 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 that 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
- Use universal precautions when handling samples
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues

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
- 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)
- Infection control manual

Method of assessment may include:

- Observation in the work place (if possible)
- Written assignments/projects or questioning should be used to assess knowledge
- 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 competency unit should be assessed after or in conjunction with:

- HLTPAT317B Work efficiently within a pathology testing environment

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.

- Equipment, solutions, agar plates and samples may include:*
- Analyser cartridges. Cassettes or strips
 - Analysers
 - Centrifuges
 - Pipettes
 - Pre-packaged test kits for direct antigen tests (eg RSV screens of NPA, HCG, IM or D-Dimer tests)
 - Laboratory glassware
 - Stains
 - Solvents
 - Alcohol
 - Specimens

- Personal protective equipment may include but is not limited to:*
- Laboratory Gowns, Gloves, Eye protection
 - Enclosed foot wear
 - Masks if indicated by test protocol

Organisation policies and procedures includes"

- Collection and documentation of client personal and clinical information
- Confidentiality of client information
- Preparation for specimen collection procedures
- Performance of specimen collection procedures
- Infection control
- Work health and safety (WHS)
- Specimen preparation, labelling, storage and transport
- Maintenance of specimen integrity
- Documentation and recording keeping
- Handling of waste
- NATA and ISO accreditation

Specimen additives may include:

- Acids
- Sodium Hydroxide
- Anticoagulants
- Preservatives including formalin
- Transport media

Recommended safety precautions include:

- Washing hands
- Cleaning spills
- Cleaning and disinfection (using approved methods) of soiled areas
- Changing and discarding soiled gloves
- Using the correct methods to decant fluids from samples and equipment
- The consuming of food or beverages within a laboratory is prohibited as is smoking

Correct techniques to separate samples include:

- Centrifugation
- Aspiration
- Pipetting

Recommended techniques include:

- Pipetting
- Aliquoting
- Weighing of chemicals and samples
- Calculation of amount (volume or weight) of required additives
- Measuring pH (with litmus paper or meter)
- Reading test strip result
- Record test and QC results

Basic tests include

- Specimen reception
- Direct antigen tests (HCG, RSVDGA, IM, D-Dimer)
- ESR
- pH urines
- Plating specimens in Microbiology
- Staining of slides

Document test and control results includes:

- Record QC with results as per protocol
- Action to be taken if QC is unacceptable (and record any action taken)

Unit Sector(s)

Not Applicable