Australian Government

Department of Education, Employment and Workplace Relations

HLTIN302C Process reusable instruments and equipment in health work

Release: 1

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Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTIN302B Process reusable instruments and equipment in health work	HLTIN302C Process reusable instruments and equipment in health work	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 for workers in the health care setting to clean and sterilise reusable instruments and equipment and to maintain associated environments. All procedures must be carried out in accordance with current infection control guidelines, Australian and New Zealand Standards and the policies and procedures of the health care establishment

All tasks must be carried out in accordance with State or Territory legislative requirements that affect work practices of the health care establishment and/or health care worker

Application of the Unit

Application

This unit is applicable to health care workers who are responsible for processing reusable instruments and equipment and maintaining associated environments in a health care facility

Application of this unit should be contextualised to reflect any specific workplace infection risks, hazards and associated infection control practices relating to specific workplace instruments and equipment in line with individual workplace policies and procedures

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Pre-requisite unit	This unit must be assessed after successful achievement of pre-requisite: • HLTIN301C Comply with infection control policies and procedures

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 clean used items	1.1 Follow *safe work practices* and standard precautions at all times in accordance with *legislative and workplace guidelines* 1.2 Dispose of sharps and sharps debris into a container that meets Australian/New Zealand Standards at the point-of-use 1.3 Segregate and *dispose of waste* according to organisation and legislative requirements

ELEMENT	PERFORMANCE CRITERIA
2. Clean and dry used items	2.1 Maintain *work flow protocols* in instrument reprocessing area 2.2 *Prepare* instruments *for cleaning* 2.3 Select and safely use *appropriate cleaning agents* 2.4 Use *cleaning methods* that avoid the generation of aerosols 2.5 Dry and inspect instruments for damage and remaining debris 2.6 Monitor the *cleaning process*
3. Prepare and pack items for sterilisation	3.1 Open and unlock instruments with hinges or ratchets 3.2 Prepare instrument trays in accordance with workplace protocols 3.3 Package or wrap *critical site instruments* in a manner that prevents damage to delicate items 3.4 Place the appropriate chemical indicator into packages as required in accordance with current Australian/New Zealand Standards and workplace protocols 3.5 Label packs with the contents of the pack and *batch control data* as required in accordance with current Australian/New Zealand Standards and workplace protocols 3.6 Seal wrapped trays with steriliser indicator tape as required in accordance with current Australian/New Zealand Standards and workplace protocols

ELEMENT	PERFORMANCE CRITERIA
4. Sterilise loads	4.1 *Operate the steriliser* safely and in accordance with manufacturer instructions, legislative guidelines and workplace protocols 4.2 *Monitor* each sterilising cycle and record the details as specified in current Australian/New Zealand Standards 4.3 *Maintain records* for each sterilising cycle as required in accordance with current Australian/New Zealand Standards and workplace protocols 4.4 Unload the steriliser on the completion of the drying cycle to ensure sterility of items 4.5 Follow *criteria for release* of processed items as specified in current Australian/New Zealand Standards 4.6 Store sterile packs to maintain sterility in accordance with workplace protocols
5. Maintain sterilising equipment	5.1 Clean and check sterilisers routinely as required in accordance with current Australian/New Zealand Standards and workplace protocols 5.2 Follow the preventive maintenance program as established by the workplace in conjunction with manufacturer or maintenance contractor 5.3 Monitor the sterilising cycles at the intervals specified in current Australian/New Zealand Standards

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:

- Instrument maintenance checklists

- Requirements for the monitoring of sterilisation cycles
- Safe work practices, standard precautions and organisation protocols for the reprocessing and storage of reusable instruments
- Safe work practices and standard precautions when handling and disposing of sharps including:
  - destination of different types of sharps after use
  - reprocessing of sharp instruments
  - safe handling of local anaesthetic cartridge and needle
  - transfer of sharps between operator and assistant
- The level of reprocessing required for non-critical site instruments, semi-critical site instruments and critical site instruments
- Workflow protocols in the instrument reprocessing area
- Workplace procedures for manual cleaning
- Workplace procedures for steriliser use
- Workplace procedures for using an ultrasonic cleaner and/or thermal washer-disinfector

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Consistently use safe handling, drying and cleaning protocols
- Consistently use correct packing, assembly and wrapping procedures for sterilisation and storage
- Consistently prepare items for sterilisation
- Consistently use safe operation of sterilisation equipment
- Consistently interpret data and complete sterilisation records
- Consistently use appropriate work health and safety (WHS) procedures and comply with current Australian and New Zealand Standards

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:

- Consistently follow safe work practices and apply standard precautions during cleaning and preparation of items for sterilisation:
  - check items for defects after cleaning
  - select and safely use appropriate cleaning agents
  - select and wear appropriate personal protective equipment
- Consistently dry items before packaging
- Consistently maintain workflow protocols in instrument reprocessing area from contaminated to clean to sterile
- Consistently operate mechanical cleaners including ultrasonic cleaner and thermal

washer-disinfector
- Consistently operate the steriliser in a safe and effective manner
- Consistently protect sterile items from all vapours, aerosols and splashing generated during procedures, handwashing, instrument washing, ultrasonic cleaning and reprocessing
- Consistently store packaged items in a clean place away from sources of moisture and contamination
- Consistently store unwrapped sterilised items in dedicated clean, dry containers that are protected from aerosol contamination
- 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 preferred for assessment of this unit • Consistency of performance should be demonstrated over the required range of workplace situations
Context of and specific resources for assessment:	• Assessment should replicate workplace conditions as far as possible • Simulations must not be used to represent workplace conditions

Method of assessment

- Observation in the work place
- Evidence of essential knowledge and understanding may be provided by:
  - traditional or online (computer-based) assessment
  - written assignments/projects
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice
- Questioning
- Staff and/or client feedback
- Supporting statement of supervisor
- Authenticated evidence of relevant work experience and/or formal/informal learning
- Role play simulation

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 may be assessed in conjunction with related work health and safety competency units

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.

Safe work practices may include but are not limited to:

- Treatment of all used items as a potential source of infection
- Personal hygiene practices especially washing and drying hands
- Work practices for the safe handling of sharps
- Work practices for the safe disposal of sharps and other clinical waste
- The use of personal protective equipment:
  - heavy duty gloves
  - mask and protective eyewear
  - hair protection or covering
  - protective clothing and safety footwear
- Safe handling, storage and disposal of chemicals
- Safe handling techniques especially as they relate to lifting and handling dangerous and contaminated items

Legislative and workplace guidelines may be included in:

- The current and endorsed version of the Australian/New Zealand Standards
- Infection control guidelines for the transmission of infectious diseases in the health care setting
- State or Territory legislative requirements
- The Material Safety Data Sheets for the chemicals used
- Organisation infection control policies and procedures
- WHS policies and procedures

Waste may include but is not limited to:

- Clinical waste:
  - discarded sharps
  - human tissues
  - laboratory waste
  - any other waste as specified by the workplace
- Related waste:
  - radiographic waste
  - chemical and amalgam waste
  - cytotoxic waste
  - pharmaceutical waste
  - radioactive waste
- General waste

Disposal of waste requirements may include:

- Disposal in accordance with:
  - Environment Protection (Waste Management) Policy
  - Environment Protection (Waste Management) Regulations
  - Australian and New Zealand standards
  - Organisation policy

Work flow protocols may include:

- Separate handwashing facilities
- Sink suitable for disposal of liquid waste
- Cleaning sink
- One direction flow of instruments from contaminated to clean to sterile
- Designated work area that is physically separate to prevent possible contamination of processed items
- Identification and reporting of disruptions to work flow protocols in accordance with workplace procedures

Preparation of instruments for cleaning may include:	• Sorting according to type of instrument and corresponding cleaning method • Written procedures for handling specialised items • Disassembly of instruments where possible for detergent to reach all surfaces • Checking for instrument defects, damage and missing parts
Selection and use of appropriate cleaning agents may include:	• Meeting requirements of Product Data Bulletins and Materials Safety Data Sheets for the chemicals used
Cleaning methods may include:	• Initial treatment of used instruments close to their point of use to decrease bioburden • Thermal washer/disinfector in accordance with current Australian/New Zealand Standards • Ultrasonic cleaner in accordance with current Australian/New Zealand Standards • Manual cleaning
Monitoring the cleaning process may include:	• Visual inspection of all items for cleanliness and absence of detergent or rinse additive residues • Daily cleaning and maintenance of ultrasonic cleaner and washer/disinfector according to Australian/New Zealand Standards • Daily performance testing of ultrasonic cleaner according to Australian/New Zealand Standards • Daily checks of washer/disinfector function and detergent dispenser
Critical site instruments may include:	• Instruments used to enter or penetrate into the tissue, cavity, organs or bloodstream of a client • Instruments which must be sterile at time of use
Batch control data may include:	• Steriliser identification number or code • Date of sterilisation • Cycle or load number

Sterilisers may include:

- Portable (benchtop)
- Downward displacement
- Pre-vacuum
- Dry heat

Operation of the steriliser may include:

- A load configuration that:
  - ensures items do not touch the chamber walls
  - contains items within the load carrying basket or tray
  - permits total steam penetration to all surfaces
  - enures wrapped items are dry on completion of the drying cycle
  - reduces damage to packs and their contents
  - ensures safe handling on the completion of cycle
- Selection and activation of the appropriate sterilisation cycle
- Selecting the appropriate drying time for the composition of the load
- Ensuring the cycle is complete and sterilisation parameters have been met before removing items
- Observing safety precautions when unloading and transporting items
- Reporting and following workplace protocols when sterilisation errors occur

Sterilising cycle records may include:

- The date of the cycle
- The steriliser number or code
- The cycle or load number
- The exposure time, temperature and pressure
- The name or identification of the loading operator
- The name or identification of the person authorising release of load contents from the sterilising area
- The specific contents of the load
- The readout result of physical, chemical or biological/enzymatic indicators that are used

Monitoring of sterilisers may include but is not limited to:

- Daily (for Pre-vacuum sterilisers):
  - external chemical indicator leak rate test
  - bowie Dick
- Every packaged item:
  - external chemical indicator
- Every cycle:
  - electronic printout of sterilisation parameters
  - chemical indicator (Class 4,5 or 6)

Criteria for release of processed packaged items may include:

- Achievement of cycle parameters as set during performance validation
- External chemical indicators have correct colour change
- Packaged items are intact and have no visible moisture
- Correct result of other tests:
  - biological indicators
  - enzymatic indicators
  - process challenge devices
  - electronic data loggers

Routine cleaning and checking of sterilisers may include but is not limited to:

- Daily checks:
  - floor of steriliser is free of debris
  - chamber drain and filter are clear
  - recording devices, gauges and timers are functioning correctly
  - water reservoir (portable benchtop sterilisers) emptied, cleaned and refilled with distilled water
  - door seals are intact
- Cleaning:
  - loading tray and external surfaces cleaned daily
  - steriliser chamber cleaned weekly when cold

Unit Sector(s)

Not Applicable