



Australian Government

Department of Education, Employment and Workplace Relations

HLTSTE308C Care for surgical instruments

Release: 1

HLTSTE308C Care for surgical instruments

Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTSTE308B Care for surgical instruments	HLTSTE308C - Care for surgical instruments	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 care for surgical instruments following relevant standards, guidelines, policies and procedures and manufacturer's instructions

Application of the Unit

Application

The application of knowledge and skills described in this competency unit could take place in a range of health settings, including hospitals, specialist sterilisation facilities and day surgery units

The application of knowledge and skills takes place around standards, guidelines, policies and procedures and under the supervision of a qualified person

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Pre-requisite unit

This unit must be assessed after successful achievement of pre-requisite:

- HLTSTE301D Clean reusable medical equipment

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

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| 1. Identify cleaning requirements of a range of surgical instruments | 1.1 Select cleaning process appropriate to each surgical instrument in line with relevant legislative requirements and following manufacturer's recommendations |
| | 1.2 Take into account the composition and manufacturing process of <i>surgical instruments</i> |
| | 1.3 Take into account the risk of galvanic corrosion, factors that cause pitting and corrosion and the effect of treatment for the various metal surfaces |
| | 1.4 Identify surfaces requiring remedial processes |
| | 1.5 Identify faulty medical devices and report in line with relevant requirements, policies and procedures |
| | 1.6 Work with an understanding of the risk to clients and corrosion risk of debris retained on instruments with textured surfaces |
| | 1.7 Identify items requiring <i>insulation testing</i> |
| 2. Prepare for <i>cleaning</i> of a range of surgical instruments | 2.1 Prepare general surgical instruments for cleaning in line with current Australian/New Zealand Standards and associated guidelines |
| | 2.2 <i>Disassemble instruments for cleaning</i> as required in line with manufacturer's and organisation guidelines and using correct dismantling techniques |
| | 2.3 Select enzymatic detergents to soak instruments as required in line with manufacturer's instructions |
| | 2.4 Follow safe work practices to conduct insulation testing as required |
| | 2.5 Follow organisation guidelines, Australia/New Zealand Standards and manufacturer's instructions when receiving, disassembling and cleaning instruments on loan |
| | 2.6 Identify and differentiate between re-usable and single use items such as diathermy loops in order to process only reusables |

ELEMENT**PERFORMANCE CRITERIA**

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| 3. Apply cleaning processes to a range of surgical instruments | <p>3.1 Address particular requirements of a range of general surgical instruments</p> <p>3.2 Soak instruments as required and rinse off gross debris in line with manufacturer's instructions for effective and safe use of enzymatic detergents</p> <p>3.3 Brush <i>instruments with textured surfaces</i> in the direction against the design to remove the debris effectively and in line with safety requirements</p> <p>3.4 Address <i>requirements of instruments with tightly coiled structures</i> such as flexible reamers</p> <p>3.5 Flush instruments with tightly coiled structures with high pressured water and brush the cannulations, attaching to the ultrasonic's flushing mechanism ensuring that flexion opens the coil as much as possible</p> <p>3.6 Check for retained debris by safely flushing with high pressure water and high pressure air</p> <p>3.7 Safely process fine, delicate items, brushing gently with a suitable brush to remove adherent soil</p> <p>3.8 Follow guidelines for safe and correct processing of instruments with specific processing requirements</p> |
| 4. Check quality of cleaning of surgical instruments | <p>4.1 Inspect instruments during and after processing in line with identified requirements</p> <p>4.2 Inspect instruments with textured surfaces for retained debris under lighted magnification</p> <p>4.3 Inspect instruments for completeness and working function</p> <p>4.4 Identify faults in the cleaning process and address in line with scope of own work role</p> |

Required Skills and Knowledge

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:

- Composition and manufacturing process of surgical instruments and how these impact on the correct use and selection of cleaning process eg various grades of stainless steel and properties of martensitic steel
- Detergency action and standard precautions procedures
- Enterprise code of practice
- General categories of instruments and associated cleaning requirements
- Impact on client care of defective insulation being used on surgical equipment
- Relevant legislation for selection and reprocessing of reusable medical devices
- Reporting requirements and mechanisms for faulty medical devices
- Standards, including AS/NZS 4187, AS/NZS 4815, *Therapeutic Goods Amendment (Medical Devices) Bill 2002* and the *Therapeutic Goods (Medical Devices) Regulations 2002* Relevant state/territory guidelines for sterilising services, NCCTG (2004) Reducing Public Health Risks Associated With Reusable Medical Devices
- The importance of cleaning and inspection as a contribution to client safety

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Accurately complete all documentation
- Address relevant WHS, infection control and risk management requirements
- Comply with relevant Australian /New Zealand standards and associated guidelines
- Demonstrate consistency of performance over a number of trials

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 cleaning processes
- Apply problem solving skills - to use available resources
- Follow manufacturer's recommendations, the *Therapeutic Goods Amendment (Medical Devices) Bill 2002* and the *Therapeutic Goods (Medical Devices) Regulations 2002* for care of surgical instruments
- Follow manufacturer's, professional and organisation policies and procedures
- Identify general and specialist surgical instruments
- Identify items requiring insulation testing
- Select and use personal protection equipment
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues, including appropriate practices to ensure efficient use of resources
- Use literacy, numeracy and oral communication skills required to fulfil the position in a safe manner as specified by the health care facility

Evidence Guide

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
- 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
- Consistency of performance should be demonstrated over the required range of situations relevant to the workplace

Context of and specific resources for assessment:

- Assessment should replicate workplace conditions as far as possible
- Simulations may be used to represent workplace conditions as closely as possible
- Resources essential for assessment include access to:
 - relevant workplace or appropriately simulated environment where assessment can take place
 - Australian Standards, government and organisation policies and procedures

EVIDENCE GUIDE

- 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

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.

Surgical and medical instrumentation and equipment may include:

- General instruments
- Flexible and rigid endoscopic equipment
- Insulated instruments
- Laparoscopic instruments
- Microscopic instruments
- Power tools
- Fibre optic equipment

RANGE STATEMENT

Cleaning may involve:

- Disassembly
- Solutions including:
 - soaking
 - enzymatic
 - lubrication
 - stainless steel stain remover
- Brushing of lumen/cannulated items
- Non-immersible items
- Complex specialised instrumentation
- Leak testing of flexible endoscope
- Mechanical lubrication

Disassembling instruments for cleaning may include:

- Opening ratcheted instruments for processing
- Opening taps and valves
- Disassembling and reassembling multipart instruments and stilettes to check for correct fit and function
- Using correct dismantling technique for a variety of endoscopic instruments

RANGE STATEMENT

Particular requirements for general surgical instruments may include:

- Check scissors for correct set, sharpness and barbs
- Correctly clean, inspect and check box-jointed forceps for stiffness or wear
- Identify and correctly clean and inspect instruments with long shafts for example cup biopsy forceps, punches and rongeurs, checking the shaft for debris
- Identify processes required for removal of dyes/adhesives
- Soak instruments used for Bonny's Blue to remove the dye
- Identify and process blind-ended instruments such as spackmann's cannula by processes that may include soaking and flushing safely with high pressure water
- Identify cannulated drills and process to remove impacted bone and other debris, inspecting for cleanliness prior to packaging
- Identify very fine suckers and process to remove wax blood and other organic debris using a variety of stillettes and brushes that touch the sides of the cannulation
- Identify difficult designs, follow manufacturer's instructions, dismantle for cleaning by brushing and flushing, and reassemble to check function for instruments such as Filshie clip applicators and Tonsil snares

Instruments with textured surfaces may include:

- Acetabula graters
- Reamers
- ENT files

Requirements of instruments with tightly coiled structures include:

- Soak appropriate enzymatic detergents
- Rinse off gross debris
- Follow the manufacturer's instructions for effective and safe use of enzymatic detergents
- Importance of soaking as soon as possible as part of pre-cleaning in the operating theatre
- Value of keeping the instrument moist prior to dispatch for cleaning

RANGE STATEMENT

Selection and use of enzymatic detergents includes:

- To soak instruments with soil impacted in textured surfaces
- To soak instruments with tightly coiled structures
- Follow manufacturer's instructions for effective and safe use

Instruments with specific processing requirements include:

- Flexible illuminated instruments, for example:
 - cystoscopes
 - choledochoscope
 - bronchoscope with channels
- Power tools
- Screw and implant caddies
- Items requiring manual cleaning

Safe and correct processing of flexible endoscopes may include:

- Wipe and suction with a solution immediately after the procedure, following the manufacturer's instructions
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- Follow instructions for leak testing, and soaking in enzymatic detergent solution
- Follow instructions for disassembling, brushing, wiping and checking for cleanliness
- Follow instructions for drying (eg. using alcohol to flush channels or dry under low pressure forced air)

Safe and correct processing of power tools may include:

- Follow manufacturer's instructions to prevent water entering the motor
- Identify and brush cannulation in power-tools
- Remove debris between movable, close-fitting parts

RANGE STATEMENT

Safe and correct processing of screw and implant caddies may include:

- Identify instruments likely to contain organic soil, such as drill bits
- Follow manufacturer's and organisation instructions to:
 - soak in mild detergent solution
 - rinse with flushing water
 - assist drying with low-pressure forced air (eg. leave lid on to prevent dislodging fine items)

Safe practices for manual cleaning include:

- Safe and effective brushing:
 - selecting a suitable brush
 - reducing the creation of aerosols
 - removing debris off brush before retracting it up into a cannula.
- Follow standards such as AS/NZS 4187 for safe and effective methods of manual cleaning.
- Select agents and equipment for manual cleaning following AS/NZS 4187

Safe work practices to conduct insulation testing includes:

- Follow safety requirements when operating insulation porosity testers
- Follow appliance manufacturer instructions in applying devices such as the brush to identify defects
- Follow organisation processes for the removal and replacement of defective items

Instruments on loan may include:

- Complex instruments with instructions from a loan set company
- Borrowed instruments from other hospitals

Unit Sector(s)

Not Applicable