HLTST307B Disinfect re-usable medical devices
HLTSTE307B Disinfect re-usable medical devices

Modification History
Not Applicable

Unit Descriptor

Descriptor
This unit of competency describes the skills and knowledge required to correctly and safely apply and monitor disinfection processes, including thermal and chemical disinfection

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.

The application of knowledge and skills relates to thermal and chemical disinfection processes.

Licensing/Regulatory Information

Not Applicable
Pre-Requisites

Pre-requisite units

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

- HLTIN301C Comply with infection control policies and procedures
- HLTSTE301C 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

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare for disinfection process</td>
<td>1.1 Identify disinfection requirements and check for thorough cleanliness of items to be disinfected</td>
</tr>
<tr>
<td></td>
<td>1.2 Classify instruments and client care equipment to Spauldings classification</td>
</tr>
<tr>
<td></td>
<td>1.3 Select an appropriate disinfection process in line with identified disinfection requirements and organisation policies and procedures</td>
</tr>
<tr>
<td></td>
<td>1.4 Identify workplace health and safety issues for thermal and chemical disinfection processes</td>
</tr>
<tr>
<td>ELEMENT</td>
<td>PERFORMANCE CRITERIA</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
| 2. Apply thermal disinfection processes | 2.1 Assess workplace health and safety risks in the use of thermal disinfection and take appropriate action to control identified risks  
2.2 Apply parameters for thermal disinfection to selection of duration and temperature of washer-disinfector cycles  
2.3 Follow safe work practices in the thermal disinfection process and identify and report any variations from normal  
2.4 Check printouts for thermal disinfection parameters  
2.5 Complete documentation in line with organisation requirements |
| 3. Apply chemical disinfection processes | 3.1 Use the UN code, CAS code and flammability and toxicity information in MSDSs to assess risks in the use of chemical disinfection and take appropriate action to control identified risks  
3.2 Check disinfectants and disinfectant labelling for documented compliance with therapeutic goods regulations  
3.3 Follow correct methods of use in accordance with manufacturer's guidelines and relevant Australian standards and guidelines  
3.4 Complete quality assurance documentation in line with organisation requirements  
3.5 Monitor fume extraction |
ELEMENT

4. Monitor disinfection processes

PERFORMANCE CRITERIA

4.1 Monitor chemical disinfection following manufacturer's instructions and organisation policies and procedures
4.2 Accurately use chemical test strip indicators
4.3 Monitor thermal disinfection and keep proof of process documentation in accordance with organisation policies and procedures
4.4 Observe thermocouple testing of washer-disinfector temperatures
4.5 Check thermal disinfector printouts for thermal disinfection parameters

Required Skills and Knowledge

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:

- Chemical disinfection, including:
  - cycle stages and physical parameters that influence disinfection outcomes
  - different levels of disinfectants including high level disinfectants
  - factors that impact on disinfection outcomes
  - range and selection of effective chemical disinfectants based on chemical application, type of reusable medical device and manufacturer instructions
  - therapeutic goods administration order number 54, specifically re compliance, validation of disinfectant classification (registered or listed), efficacy and disinfectant labelling
  - therapeutic goods regulations for disinfectants and disinfectant labelling
- Conditions and parameters for successful disinfection
REQUIRED SKILLS AND KNOWLEDGE

- Disinfection methods current in use in Australia
- Fundamental knowledge of infection control principles as it affects the disinfection work environment
- Fundamental knowledge of microbiology as it affects disinfection work
- Manufacturer's recommendations and validation of the product
- OHS policies, guidelines and symbols and their relevance to working in the disinfection area
- Organisation policies and procedures for disinfection
- Relevant state/territory guidelines for disinfection of reusable medical devices
- Specific monitoring equipment and procedures for thermal and chemical disinfection
- Standards for record maintenance
- Standards, including AS 2945, AS/NZS 4187 and AS 2711-1993 and GENCA Guidelines
- Terminology used in disinfection
- Thermal disinfection, including:
  - cycle stages and physical parameters that influence disinfection outcomes
  - efficacy of the disinfection process according to the killing effect on microorganisms
  - factors that impact on disinfection outcomes
  - lethality of a moist heat process for a range of temperatures
- The importance of disinfection in contributing to client safety
- The legal responsibilities providers of health care in relation to confidentiality, client rights, duty of care and implications of negligence

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Accurately complete all documentation
- Address relevant OHS, infection control and risk management requirements
- Apply knowledge of the importance of disinfection as a contribution to client safety
- Apply Spauldings classification
- Comply with AS 2945 and AS 2711-1993, AS/NZS 4187 and GENCA Guidelines
- Demonstrate fundamental knowledge of microbiology as it affects disinfection work

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:

- Complete documentation of tests, cycles and items and proof of process
- Demonstrate compliance with workplace health and safety requirements such as using
REQUIRED SKILLS AND KNOWLEDGE

- personal protective equipment
- Follow manufacturer's guidelines in applying chemical disinfection processes
- Follow organisation policies and procedures for problem solving in relation to washer decontaminator maintenance and service
- Following organisation policies and procedures for problem solving in relation to washer-disinfector maintenance and service
- Identify problems with disinfection processes and outcomes
- Identify the appropriate temperature for moist heat high level disinfection
- Identify the efficacy of disinfection processes according to the killing effect on microorganisms
- Monitor thermal and chemical disinfection processes and identify variations from normal
- Prepare, operate, load, configure and unload washer-decontaminators
- Select an appropriate chemical disinfectant from a range of effective chemical disinfectants
- Source information about standards and correct processes for chemical disinfection
- 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
- Use problem solving skills - to use available resources and prioritise workload

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
EVIDENCE GUIDE

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. Acceptable simulation requires:
  - use of thermal and chemical disinfection equipment
  - using a full range of monitoring processes
- 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
  - disinfection and monitoring equipment and accessories

**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
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.

Relevant Australian standards may include:

- AS 2945
- AS 2711-1993
- AS/NZS 4187
- GENCA Guidelines

Monitoring and accessory equipment may include:

- Physical parametric process recorders, including:
  - print outs
  - graphics and chart recorders
  - information technology data systems
- Computerised systems, including:
  - label printers
  - scanners
  - workstations
- Chemical indicators to test concentration of disinfectant
- Microbiological testing of flexible endoscopes
- Dryness testing
- Process challenge devices
- Performance qualification equipment, including:
  - computerised data loggers
  - thermocoupling devices
RANGE STATEMENT

Quality management documentation may include:

- Cycle, batch control and load description documentation
- Washer-disinfector usage and utilisation
- Volume of disinfected items by defined category
- Cleaning, monitoring, testing, fault analysis and maintenance of washer-disinfectors and associated equipment
- Dispatch/distribution by destination
- Non-conformance/non-compliance reporting
- Archiving and filing of disinfection records
- Validation report
- Proof of process

Unit Sector(s)

Not Applicable