Unit 13: Introduction to Decontamination Science

Level:	**2**
Unit type:	**Optional (General)**
Credit value:	**3**
Guided learning hours:	**20**

Unit summary

This unit aims to give learners knowledge and understanding of the work and services offered by decontamination science and how it is regulated. The unit also covers the importance of keeping accurate records and reporting malfunctioning machines and consequences of errors for individuals and staff.

Unit assessment requirements

Assessment tasks and activities must enable learners to produce valid, sufficient, authentic and appropriate evidence that relates directly to the learning outcomes and assessment criteria of the unit. Suitable forms of evidence for this unit include:

- written tasks such as reports, articles for journals, newsletters, leaflets, posters
- workbooks, work logbooks or learner diaries
- written or oral presentations
- projects
- oral question and answer.

Observation records should not be used as the primary evidence of achievement for this unit, but can be used to supplement the more appropriate forms of evidence listed above or to provide sector contextualisation or evidence of how the learner has applied knowledge within their job role.

When devising the assessment activities, centres need to look closely at the verb used in each assessment criterion to ensure that learners can provide evidence with sufficient breadth and depth to meet the requirements. Centres ned to produce assessment briefs for learners with clear instructions of what they are required to do.

Additional information

AC2.1 including:

- Health and Safety at Work Regulations
- infection prevention and control
- manual handling of equipment
- wearing of Personal Protective Equipment (PPE)
- the importance and type of PPE to use when dealing with hazardous substances
- operating and testing of sterilisers and washer/disinfectors
- potential consequences of poor practice
- safe management and use of hazardous materials, i.e. Control of Substances Hazardous to Health (COSHH)
- national policy on re-use of single use reusable medical devices
- the importance of maintaining accreditation to ISO 13485:2012 and how following workplace Standard Operating Procedures (SOP) form part of compliance.

AC3.1, cycle records including different systems, e.g. independent monitoring systems, recorder charts, steriliser, washer/disinfectors, instruments gauges and printouts, test results.

AC3.2 washers/disinfectors, sterilisers etc.

Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand how the work and services offered by decontamination science contribute to safe, high-quality patient care	1.1	Explain the contribution of decontamination science services to patient care			
		1.2	Describe the role of decontamination science in the sterilisation of reusable medical devices			
		1.3	Explain the risks to patients of failures to decontaminate reusable medical equipment/devices adequately			
		1.4	State the main categories of organisms that can cause infection if inadequate decontamination is used			
		1.5	Identify infections that have resulted from inadequate decontamination			
2	Understand the regulatory framework within which decontamination sciences operates	2.1	Outline the legislation, policy, Quality Management system and good practice underpinning the practice of decontamination science			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the importance of accurate record keeping and documentation	3.1	Explain the procedures for recording every pack, set or individual instrument through a department to provide tracking, traceability, and activity figures			
		3.2	State the importance of correctly reading records and other, relevant information			
		3.3	State the importance of correctly maintaining logbooks for the departments processing equipment			
		3.4	Explain the purpose, types, and recognition of process indicators and when they should be used			
4	Understand the methods of reporting the malfunction of machines and “fail” cycles	4.1	State the importance of immediately reporting any issues which are outside your own scope of competence to the relevant member of staff			
		4.2	State why it is important to follow agreed reporting procedures			
		4.3	Describe when and how to report any issues which are outside your own scope of competence			
5	Understand the purpose and use of decontamination certificates	5.1	State the situations/circumstances when a decontamination certification is required			
		5.2	State the information that should be recorded on a decontamination certificate			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Understand the principles of storage and distribution for reusable medical devices	6.1	Describe product release systems for sterilised packs into processed goods store for direct issue to customers			
		6.2	Explain the need for safe care and control of sterilised packages through knowledge of environmental requirements for the area and limited access to non-essential persons			
		6.3	Describe methods for procurement of new products			
		6.4	Describe transfer arrangements for raw materials into different work areas and the importance of secure storage			
		6.5	State health and safety requirements in relation to manual handling techniques and movement of heavy loads			
		6.6	Explain the need to segregate in-house and commercially prepared sterile packs			
		6.7	Describe issuing and distribution systems for processed goods			
		6.8	Describe the tracking and traceability systems in place for medical device tracking and inventory accountability			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Understand the consequences of errors in the decontamination process for patients and staff	7.1	Describe incidents where errors in the decontamination process have adversely affected patients			
		7.2	Explain how errors in the decontamination process can be minimised			
		7.3	Explain how quality management systems help to reduce the risk of errors			
		7.4	Explain the purpose of a critical incident reporting policy			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)