Unit 304  Prepare and maintain environment, instruments and equipment for clinical dental procedures

**UAN:** T/505/8108

**Level:** 2

**Credit value:** 2

**GLH:** 14

**Assessment method:** Portfolio

**Support by a sector or regulatory body:** This unit forms part of the qualification (5234) which is supported by Skills for Care and the General Dental Council

**Unit aim:** This unit focuses on the methods of infection control within the general dental environment and the application of health and safety measures for clinical dental procedures, the sterilisation of dental instruments and equipment including the safe disposal of waste.

**Learning outcome**

The learner will:

1. understand how to apply standard precautions of infection control for clinical dental procedures

**Assessment criteria**

The learner can:

1.1 present themselves in the dental setting with the **required standard of personal hygiene**

1.2 select and use correct hand washing methods for the clinical dental procedures

1.3 wear **personal protective equipment** for clinical dental procedures

1.4 maintain a clean and tidy working environment for clinical dental procedures

1.5 use **cleaning equipment** and materials in a safe manner

1.6 adjust **environmental factors** to meet the needs of the patient and the clinical dental procedure

1.7 explain the reasons for adjusting **environmental factors**

1.8 explain the decontaminants which are effective against different types of micro organisms.
### Range

#### Required standard of personal hygiene
- a) hair
- b) nails
- c) jewellery
- d) footwear
- e) uniform

#### Personal protective equipment
- a) surgical gloves
- b) face mask
- c) goggles and/or visor
- d) heavy duty gloves

#### Cleaning equipment
- a) general cleaning equipment
- b) sterilisation equipment

#### Environmental factors
- a) heating
- b) lighting
- c) ventilation and humidity

### Learning outcome

The learner will:

2. understand how to apply health and safety measures for clinical dental procedures

### Assessment criteria

The learner can:

2.1 validate dental equipment and instruments in line with manufacturers’ guidelines, organisational and legal requirements

2.2 record the outcomes of the validation of dental equipment and instruments

2.3 maintain aspiration equipment

2.4 explain the action taken when:
   a. equipment fails or is not working properly
   b. a spillage occurs

2.5 explain the reporting procedures for hazards.

### Range

#### Equipment
- a) dental chair
- b) aspirator
- c) hand pieces
- d) ultrasonic scaler
- e) x-ray machine
- f) x-ray processing equipment
- g) autoclave
h) washer dryer  
i) ultrasonic bath

**Spillage**  
a) water spillage  
b) mercury spillage  
c) body fluids  
d) chemical spillage

**Guidance:** refers also to spillage which may have occurred through surgical investigation

**Hazards**  
a) Hepatitis B  
b) HIV  
c) Herpes simplex  
d) damaged instruments  
e) sharps injury

---

### Learning outcome

The learner will:

3. be able to apply methods of sterilisation for dental instruments and equipment

### Assessment criteria

The learner can:

3.1 carry out sterilisation procedures in line with organisational and legal requirements  
3.2 explain the methods for testing that autoclaves are functioning correctly  
3.3 explain the importance of placing **equipment** and instruments in the correct location for the **stages of sterilisation**  
3.4 prepare **instruments and hand pieces** for sterilisation  
3.5 explain reason for pre cleaning instruments prior to sterilisation  
3.6 store sterilised instruments and hand pieces according to organisational and legal requirements  
3.7 maintain accurate and legible records of the decontamination and sterilisation process  
3.8 explain how the maintenance of equipment and instruments is recorded  
3.9 explain the potential risks of failing to decontaminate equipment and instruments  
3.10 explain the potential long term effects of using damaged or pre-used sterile goods.

---

### Range

**Instruments and hand pieces**  
a) non-surgical  
b) surgical
Legal requirements
a) Health Technical Memorandum 01-05 Decontamination in Primary Care Practices and subsequent updates or equivalent legal requirements in Northern Ireland, Wales or Scotland

Equipment
a) washers
b) ultrasonic cleaners

Stages of sterilisation
a) storage
b) transportation

Learning outcome
The learner will:
4. be able to safely dispose of hazardous waste and non-hazardous waste

Assessment criteria
The learner can:
4.1 list types of waste routinely found in a dental setting
4.2 explain how types of waste should be disposed of
4.3 dispose of hazardous waste in a safe manner according to legal and regulatory requirements and practice policy
4.4 explain the dangers of failing to dispose of waste correctly and promptly.

Range

Waste
a) hazardous
b) non-hazardous

Hazardous waste
a) used gloves
b) face masks
c) tissues
d) cotton wool rolls
e) gauze
f) napkins
g) alcohol wipes
h) mouthwash beakers
i) lead foil
j) needles
k) waste amalgam
l) LA cartridges
m) processing solutions
n) medicines
o) damaged sterile pre-packed items
Unit 304  Prepare and maintain environment, instruments and equipment for clinical dental procedures

Guidance

Assessment decisions for this unit will clearly reflect the learner’s competence in preparing and maintaining the clinical dental environment for a variety of general dental procedures using the correct cross infection control measures throughout.