

## Unit 304

# Prepare and maintain environment, instruments, and equipment for clinical dental procedures

**Level:** 2

**Credit value:** 2

**NDAQ number:** F/502/7346

### Unit aim

This unit focuses on infectious diseases and their routes of transmission. It concentrates on the methods of infection control and applying appropriate health and safety measures.

### Learning outcomes

There are **four** learning outcomes to this unit. The learner will:

1. be able to apply standard precautions of infection control for all treatments
2. be able to apply health and safety measures for all treatments
3. be able to apply methods of sterilisation for dental instruments and equipment
4. be able to safely dispose of hazardous waste and non-hazardous waste

### Guided learning hours

It is recommended that **17** hours should be allocated for this unit, although patterns of delivery are likely to vary.

### Details of the relationship between the unit and relevant national standards (if appropriate)

This unit is linked to the National Occupational Standards unit 304 Prepare and maintain environments, instruments, and equipment for clinical dental procedures (OH1).

### Support of the unit by a sector or other appropriate body (if required)

This unit is endorsed by Skills for Health.

### Assessment

This unit will be assessed by:

- portfolio containing examples of observed practice in the learner's workplace or via an appropriate alternative method (see guidance at the end of the unit)

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

Outcome 1            be able to apply standard precautions of infection control for all treatments

### **Assessment Criteria**

The learner can:

1. wear **personal protective equipment** for all **treatments**
2. maintain a clean and tidy working environment for all **treatments**
3. use **cleaning equipment** and materials in a safe manner
4. adjust **environmental factors** to meet the needs of the patient and the procedure
5. explain which decontaminants are effective against the different types of micro organisms
6. explain the purpose of adjusting **environmental factors**.

### **Range**

#### **Personal protective equipment**

Surgical gloves, face mask, goggles and/or visor, heavy duty gloves

#### **Cleaning equipment**

General cleaning equipment, sterilisation equipment

#### **Environmental factors**

Heating, lighting, ventilation and humidity

#### **Treatments**

Oral health assessment, protection of oral health, dental imaging, prevention and control of periodontal disease, cavity restorations, fixed and removable prostheses, orthodontic appliance, non-surgical endodontic treatment, extraction of teeth and minor oral surgery

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Outcome 2            be able to apply health and safety measures for all treatments

### **Assessment Criteria**

The learner can:

1. maintain **personal hygiene**
2. demonstrate that **equipment** is functioning prior to use
3. check equipment and materials are safe and secure, and leave them at the correct level of cleanliness, and in the correct location, on the completion of **procedures**
4. demonstrate methods of hand cleansing
5. explain what action to take in the event of **equipment** failure
6. explain what actions to take in the event of a **spillage** occurring
7. explain the reporting procedures for **hazards** and why they should be reported
8. explain the reasons why records must be kept in relation to the servicing of equipment.

### **Range**

#### **Personal hygiene**

Hair, nails, jewellery, footwear, uniform, social, clinical and aseptic hand-washing procedures.

#### **Hazards**

Blood contamination, Hepatitis B, HIV, herpes simplex, damaged instruments, sharps.

#### **Spillage**

Water spillage, mercury spillage, body fluids, chemical spillage.

#### **Equipment**

Dental chair, aspirator, hand pieces, ultrasonic scaler, X-ray machine, X-ray processing equipment, autoclave, instrument washer, ultrasonic bath.

#### **Procedures**

Oral health assessment, protection of oral health, dental imaging, prevention and control of periodontal disease, cavity restorations, fixed and removable prostheses, orthodontic appliance, non-surgical endodontic treatment, extraction of teeth and minor oral surgery.

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

### **Assessment Criteria**

The learner can:

1. prepare **instruments and hand pieces** for sterilisation
2. carry out sterilisation procedures
3. store sterilised instruments and hand pieces according to practice policy
4. maintain accurate and legible records of sterilisation procedures
5. explain the reason for pre cleaning instruments prior to sterilisation
6. explain the methods available for testing autoclaves are functioning correctly
7. explain the importance of placing **equipment** and instruments in the correct location relevant to the different **stages of sterilisation**
8. explain the potential risks of not decontaminating equipment and instruments
9. explain the potential long term effects of using damaged or pre-used sterile goods.

### **Range**

#### **Instruments and hand pieces**

Non-surgical, surgical

#### **Equipment**

Washers, ultrasonic cleaners

#### **Stages of sterilisation**

Storage sterilisation, transportation

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Outcome 4      be able to safely dispose of hazardous waste and non-hazardous waste

**Assessment Criteria**

The learner can:

1. list the different types of **waste**
2. dispose of **hazardous waste** in a safe manner according to practice guidelines
3. explain the dangers of not disposing of waste correctly and promptly.

**Waste**

Hazardous, Non-hazardous

**Hazardous waste**

Used gloves, face masks, tissues, cotton wool rolls, gauze, napkins, alcohol wipes, mouthwash beakers, lead foil, needles, waste amalgam, LA cartridges

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

### Notes for guidance

This section provides explanations and definitions of the terms used in this workforce competence. In competences, it is quite common to find words or phrases used which you will be familiar with, but which, in the detail of the competence, may be used in a very particular way.

<b>Additional protective equipment</b>	Includes types of personal protective equipment such as visors, protective eyewear and radiation protective equipment
<b>Contaminated</b>	Includes items contaminated with body fluids, chemicals.  Any pack/item opened and not used should be treated as contaminated
<b>Equipment</b>	equipment may refer to equipment used in dental procedures, cleaning equipment or protective equipment
<b>Personal hygiene</b>	It is important that when working close to patients you inspire their confidence. Maintaining personal hygiene includes ensuring a clean professional appearance as well as hand washing/cleansing before, during and after and activity.
<b>Personal protective clothing</b>	Includes items such as plastic aprons, gloves - both clean and sterile, eyewear, footwear, dresses, trousers and shirts and gowns.  These may be single use disposable clothing or reusable clothing
<b>Potentially infectious conditions</b>	Potentially infectious conditions might relate to the worker her/himself or someone else. Could include – Influenza, AIDS, Measles, Herpes Varicella-Zoster (chicken pox), Shingles, Infective Mononucleosis ( glandular fever), Acute Viral Parotitis (mumps)

#### **Other sources of competence evidence:**

Some competence criterion may be difficult to evidence by observation and/or expert witness testimony because they may refer to contingencies or infrequently occurring activities.

- **Work Products:** These are non-confidential records made, or contributed to, by the learner, e.g. incident records, maintenance reports.
- **Confidential Records:** These may be used as evidence but must not be placed in the learner's portfolio. They must remain in their usual location and be referred to in the assessor records in the learner's portfolio e.g. Copies of risk assessments the learner has contributed to.
- **Questioning:** Questions may be oral or written. In each case the question and the learner's answer will need to be recorded eg what are your workplace procedures for dealing with risks which you are not able to handle yourself?
- **Professional discussion:** This should be in the form of a structured review of the learner's practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that the learner knows and understands principles which support practice; policies, procedures and legislation, and that the learner can critically evaluate

their application e.g. Describe your responsibilities for health and safety in your workplace.

- **Original Certificates:** Certificates of training and records of attendance must be authentic, current and valid. The learner's assessor will also want to check the content of such training so that this can be matched to the standards and check that the learner has retained and can apply learning to practice e.g. City & Guilds Certificate in Health and Safety at Work
- **Case Studies, projects, assignments and candidate/reflective accounts of your work:** These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of the learner's qualification. Occasionally, because an event happens rarely or may be difficult to observe, the learner may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit. E.g. an account of an occasion when you reported on a high risk hazard
- **Witness Testimony:** Colleagues, allied professionals and individuals with whom the learner works with may be able to provide testimony of their performance. The learner's assessor will help him/her to identify the appropriate use of witnesses.