SECTION 1

INFECTION CONTROL IN THE DENTAL SURGERY

It is the responsibility of the dental team to ensure that the appropriate and correct procedures are carried out in relation to infection control to protect the patients, the public and themselves.
INFECTION CONTROL IN THE DENTAL SURGERY

Figure 1.1
PROTECTIVE WEAR

FIGURE 1.1a, b, c

Name
(a) Mask (b) Safety glasses (c) Face shields

Function, precautions and directions for use
- To protect the dental team from micro-organisms, debris, splatter and chemicals
- A mask is worn to protect the mucous membranes of the nose and mouth. It filters out small particles
  - Should always be changed between each patient or before if it is visibly soiled
  - Should be worn during patient care, sterilisation, disinfection, cleaning procedures and during laboratory work
- Safety glasses and/or face shields are worn to protect the mucous membranes of the eyes
  - Should be disinfected between patients
  - A face shield can be used instead of safety glasses, but a mask must still be worn
  - Should be large enough to cover the eye area completely and provide protection from the top and side. With some safety glasses additional top and side shields have to be added to be used for this purpose
- Safety glasses are available to fit over prescription eye wear
- Must be shatterproof

Varieties
Different types of masks and glasses available
Basic Guide to Dental Instruments

Figure 1.2

Figure 1.3

(a)

(b)
FIGURE 1.2

Name
Protective gloves

Function and directions for use
• To protect the dental team from direct contact with micro-organisms, debris, splatter and chemicals
• Worn during patient care when coming in contact with contaminated objects and chemicals, and when working intra-orally
• Always change between patients
• Do not wash gloves
• Replace damaged and ripped gloves immediately
• Always wash and dry hands thoroughly prior to donning gloves
• It is important to make sure gloves fit properly

Varieties
• Made from many different materials, i.e. latex, vinyl and nitrile
• Available packaged as sterile surgical gloves
• Rubber utility gloves/heavy duty gloves are used during sterilisation procedures

WORK SURFACES

FIGURE 1.3a, b

Name
Non-permeable barriers

Function and features
• Used to cover surfaces to prevent contamination
• Must be impermeable
• Single use; to be disposed of in the contaminated waste

Varieties
Many different types and sizes available
INFECTION CONTROL IN THE DENTAL SURGERY

Figure 1.4

Figure 1.5
ITEMS USED FOR IDENTIFICATION AND ORGANISATION DURING STERILISATION

**FIGURE 1.4**

**Name**
Coloured identification rings

**Function and feature**
- Used to organise and identify instruments
- Autoclavable

**Varieties**
- Many different types and sizes available
- Coloured autoclavable tape can also be used

**FIGURE 1.5a, b, c**

**Name**
Instrument cassettes

**Function(s)**
- Used to organise and identify instruments during sterilisation and disinfection
- Can double as an instrument tray during procedures

**Varieties**
Many different types and sizes available, including plastic and metal types
INFECTION CONTROL IN THE DENTAL SURGERY

Figure 1.6

(a)  
(b)

Figure 1.7

Figure 1.8
Infection Control in the Dental Surgery

FIGURE 1.6

Name
Autoclave tape

Function and features
- Used to secure instrument wrap or pouches prior to sterilisation
- Will change colour once exposed to a certain temperature, but this does not indicate whether sterilisation has occurred
- Can be written on to indicate the contents of the package

Varieties
Many different types and sizes available

FIGURE 1.7a, b

Name
Sterilisation pouch

Functions and features
- Used to wrap instruments prior to sterilisation
- Aids in organisation of instruments
- One side may be transparent to allow for viewing of the pouch contents (Figure 1.7a, b)
- Coloured markings indicate that a certain temperature has been reached during the sterilisation cycle
- Instruments will remain sterile in pouch until it is punctured or opened

Varieties
Many different types and sizes available

STERILISATION EQUIPMENT

FIGURE 1.8

Name
Autoclave

Function and directions for use
- Uses steam under high pressure to achieve sterilisation
- Follow manufacturer’s directions for use
- Consult local legislation and guidelines in regard to appropriate sterilisation procedures

Varieties
Many different types and sizes available
Figure 1.9

Figure 1.10
MANUAL CLEANING AIDS

FIGURE 1.9

Name
Bottle brushes

Functions, features and precautions
- Manual cleaning is never recommended except when ultrasonic cleaning is not effective in removing debris
- Used along with a soapy cleaner to remove debris prior to sterilisation
- Allows cleaning inside suction tubes
- Long handle allows a greater distance between the operator and the contaminated object
- Should always be used submersed in water to reduce splatter
- Always wear heavy duty utility gloves while using bottle brushes

Varieties
Many different types and sizes available

FIGURE 1.10a, b

Name
Bur brushes

Function and precautions
- Manual cleaning is only recommended when ultrasonic cleaning is not effective in removing debris
- Used along with cleaner to remove debris prior to sterilisation
- Allows for the cleaning of burs with small, hard-to-clean flutes
- Always wear rubber utility gloves/heavy duty gloves while using bur brushes

Varieties
Many different types and sizes available
INFECTION CONTROL IN THE DENTAL SURGERY

Figure 1.11

Figure 1.12
Infection Control in the Dental Surgery

FIGURE 1.11

Name
Ultrasonic cleaner

Function(s) and directions for use
• Used along with a soapy cleaner
• Uses sound waves to reduce bioburden and debris from instruments prior to sterilisation
• Follow manufacturer’s instructions for solution types and length of time needed for cleaning

Varieties
Many different types and sizes available

FIGURE 1.12

Name
Assistina

Function(s) and directions for use
• Uses air to run cleaning fluid solution and oil through handpieces
• Used to expel debris from handpieces
• Plastic cover over handpiece attachment is used to reduce aerosol
• Follow manufacturer’s instructions for use

Varieties
Many different types available