OH1 Prepare and maintain environments, instruments, and equipment for clinical dental procedures

OVERVIEW

This standard concerns the preparation and maintenance of environments, instruments and equipment for clinical dental procedures, and the control of infection and cross-infection. It includes general cleaning, preparing the appropriate materials for clinical procedures, handling waste and spillage, routine maintenance, stock control and sterilisation.

This standard is designed to relate to environments which are specifically designated for clinical dental procedures (such as routine and day surgery, out-patients and clinics) and community locations which are turned round for that use on a specific occasion (e.g. a person's home, a residential home).

You will need to know about different methods of cleaning, infection control and sterilisation, when and why they should be used, and the potential consequences of inaction.

This standard is applicable to any member of the oral health care team who has responsibility for preparing and maintaining environments for clinical dental procedures whether they are hospital, surgery or community based.

Users of this standard will need to ensure that practice reflects up to date information and policies.

Version No 1

KNOWLEDGE AND UNDERSTANDING

You will need to know and understand:

1. The principles and causes of infection and cross-infection
2. Micro-organisms - the meaning and significance of the terms pathogenic and non-pathogenic
3. Potentially infectious conditions (such as hepatitis B, HIV, herpes simplex, etc) - what they are, the appropriate action to take and why they should be reported
4. The scientific principles of and difference between sterilisation, asepsis,
disinfection and social cleanliness and how each relates to the patient, the setting, the procedure and equipment
5. What is meant by standard precautions and how this is applied in the preparation of environments, including zoning and protective barriers
6. When sterile, aseptic and disinfectant procedures may need to be carried out, and the possible consequences of not doing so
7. Good hygiene practice - what it is and methods of maintaining it
8. Effective hand cleansing - what it is and methods for achieving it
9. The purpose of personal protective clothing and the different sorts which may be necessary
10. The cleaning agents which are appropriate to different surface areas
11. The nature of decontaminants, when and why they are used
12. Methods of cleaning different types of equipment, instruments and handpieces and the different activities which are appropriate to each
13. Methods of sterilisation, the types of sterilisers which are used and their relationship to the different equipment/instruments (including pre-packed items) and the disposal of waste
14. Methods of testing to show that autoclaves and other equipment are functioning effectively
15. The correct sequence and duration for different forms of sterilisation
16. The different forms of packaging and storing sterilised instruments and handpieces and which methods are appropriate to which circumstances
17. The potential long-term effects of using damaged or pre-used sterile goods
18. Methods of safe handling of items, before during and after sterilisation and the reasons for this
19. The actions which are appropriate to take when sterilisation equipment is not working to the optimum level
20. The purposes of maintaining the clinical environment as clear and clean as possible
21. The reasons for keeping heating, lighting and ventilation appropriate to the treatment and the effects which they can have on infection and cross-infection
22. Safe and secure environments - what this means for treatment areas and the dangers which are inherent in them
23. The instruments, equipment, materials and medicaments which may be necessary for different treatments and correct methods of preparing these
24. Why shortfalls/failures in instruments, equipment, materials and medicaments should be reported
25. The purpose and correct methods of preparing and handling the range of equipment, instruments, materials and medicaments used in dentistry
26. The relationship of equipment, instruments and materials/medicaments to different treatments and the stages within them
27. Legal requirements and manufacturers instructions relating to servicing of equipment including recording and maintenance of service intervals
28. The different types of waste and spillage including those which may be of particular relevance to the procedure and setting
29. Methods of disposing of waste and spillage and the relationship of this to different types
30. Procedures for disposing of damaged sterile pre-packed items
31. The dangers of not disposing of waste and spillage in the correct ways
32. Why waste and spillage should be disposed of promptly
33. Why it is necessary to report damaged disposal containers
34. Why equipment etc must be placed in the correct locations for storage,
sterilisation or transportation
35. Health and safety regulations: the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations
36. The legal and organisational policies relating to the disposal of waste and spillage from clinical treatments and investigations (such as the Environmental Protection Act, Controlled Waste Regulations)

PERFORMANCE CRITERIA

You must be able to do the following:

1. apply standard precautions for infection control and take other appropriate health and safety measures
2. wear the appropriate personal protective equipment at all times during cleaning and sterilisation procedures and maintain personal hygiene
3. ensure that the environment where procedures are to be undertaken is clean and tidy, and allows for safe working practices at all times
4. correctly and safely use cleaning equipment and materials that are appropriate to the items or surface area to be cleaned, and the level of cleanliness required
5. fully prepare instruments, equipment, materials and medicaments that are necessary for planned procedures so that they are safe and ready
6. ensure that equipment is functioning correctly and take the appropriate action when it is not
7. use equipment in a manner which is consistent with the manufacturer’s instructions and leave ready for re-use
8. adjust heating, lighting, ventilation and humidity appropriately to meet the needs of the procedure and patient
9. use methods of controlling infection which are appropriate to:
   1. the environment
   2. the nature of the clinical dental procedure
10. prepare and handle instruments and handpieces for sterilisation appropriately and in a manner which minimises danger to self and others
11. carry out appropriate sterilisation procedures in the correct sequence and duration including pre-cleaning of instruments, preparation of instrument trays, operation of autoclave and removal of instruments at correct stage in cycle
12. report any hazards, problems, or evidence of potentially infectious conditions to the appropriate person as soon as is possible
13. make equipment and materials safe and secure and leave them at the correct level of cleanliness, and in the correct location, on the completion of procedures
14. dispose of waste, spillage promptly and in a safe manner and place
15. package and store sterilised items correctly, using the most appropriate form of packaging medium and maintaining the integrity of the packaging
16. ensure that adequate supplies of stock are available for clinical procedures
17. keep accurate and legible records of sterilisation procedures
ADDITIONAL INFORMATION

This National Occupational Standard was developed by Skills for Health.

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):

Dimension: EF2 Environments and buildings