Scottish Dental Clinical Effectiveness Programme



Decontamination Into Practice

Dental Clinical Guidance



© Scottish Dental Clinical Effectiveness Programme

SDCEP operates within NHS Education for Scotland. You may copy or reproduce the information in this document for use within NHS Scotland and for non-commercial educational purposes. Use of this document for commercial purpose is permitted only with written permission. ISBN 978 1 905829 19 4 First published 2007 Updated October 2014

Scottish Dental Clinical Effectiveness Programme

Dundee Dental Education Centre, Frankland Building, Small's Wynd, Dundee DD1 4HN

 Email
 scottishdental.cep@nes.scot.nhs.uk

 Tel
 01382 425751 / 425771

 Website
 www.sdcep.org.uk

Decontamination Into Practice

Introduction

In recent years there has been greater focus on ensuring the quality of decontamination in dental practice. This was initially prompted by concerns about potential transmission of infective agents via dental instruments, including bacteria, viruses and prions. Although there are technical requirements, legislation and standards that govern decontamination, some of these documents were written primarily for the acute sector health service and historically were not easily accessible or well publicised to primary care dental services.

As part of a national initiative to improve decontamination standards in dental practice, the Scottish Dental Clinical Effectiveness Programme (SDCEP) convened a Guidance Development Group to provide guidance on decontamination that is specifically for dental teams working in primary care. Further details about SDCEP and the development of this guidance are given in Appendix 1.

Scope of this Guidance

Decontamination Into Practice is a guidance series, each part of which provides advice on a particular aspect of instrument decontamination. In addition, advice that relates to the whole decontamination process is provided in the appendices. This series is based on existing standards and guidance such as *Local Decontamination Unit Guidance* from Health Protection Scotland (HPS) and several Health Facilities Scotland (HFS) publications [*Scottish Health Technical Memoranda 2010 and 2030, Compliant Dental Local Decontamination Units in Scotland (Primary Care)*], and presents this information in a form that is more readily understandable to all members of the dental team.

Decontamination Into Practice aims to facilitate improvements in decontamination practice and support compliance with relevant statutory and mandatory requirements and standards. It includes advice to help primary dental care providers choose appropriate options for their needs, increase their awareness of the maintenance and testing requirements for decontamination equipment and help protect them if, for example, decontamination fails as a result of equipment malfunction or human error.

Statement of Intent

Decontamination Into Practice presents advice that is based on a careful consideration of the legislation and national guidance that is currently in effect in Scotland, and has been developed through consultation with experts and end-users. As advice, it does not override the individual responsibility of the health professional to make decisions appropriate to the individual dental practice.

Implementation

Changes in procedures take time and planning. Some of the advice for good practice within the *Decontamination Into Practice* series is straightforward to put into place. Other recommendations need much more consideration to implement.

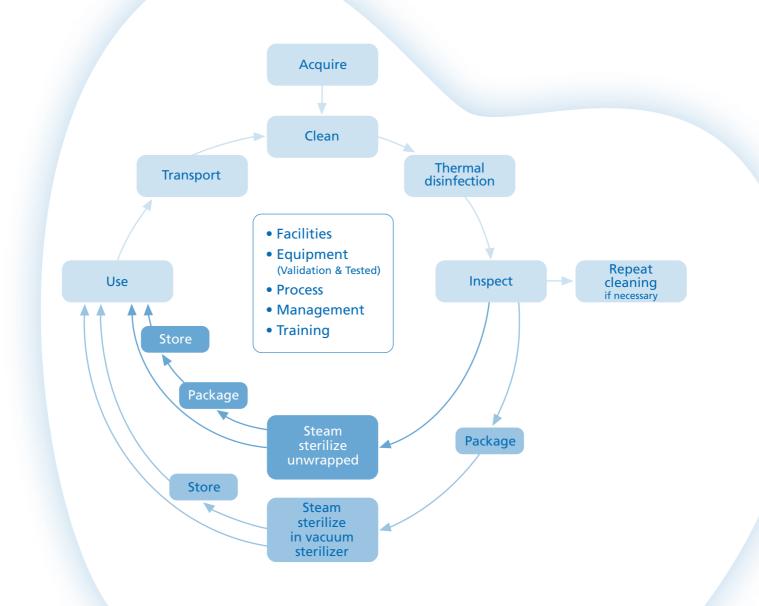
Several related initiatives have been put in place to support implementation of changes. Decontamination theory and practice is included in the Scottish dental schools' undergraduate programmes and is a fundamental component within dental nurse training; various online educational resources are provided by NHS Education for Scotland to update training in decontamination; NHS Education for Scotland has an infection control dental support team that visits practices to provide on-site infection control and decontamination training.

The contact details of organisations that can provide the latest information, training and support for decontamination can be found in Appendix 5.

A list of references is provided and direct links to the most up-to-date web-based resources are available on the ScottishDental website: www.scottishdental.org.

Decontamination of Instruments – an Overview

Decontamination is the process by which reusable items are rendered safe for further use on patients and safe for staff to handle. Decontamination is required to minimise the risk of transmission of infection between patients and between patients and staff. Decontamination of instruments (also known as reprocessing) is a complex process that involves several stages, including cleaning, disinfection, inspection and sterilization. The diagram below summarises how the individual stages ideally link together to complete the process of instrument decontamination.



It is important that each stage of the process is carried out correctly to enable instruments to be decontaminated effectively. Note that:

- Disinfection after cleaning reduces the number of viable microorganisms on instruments making them safer to handle. It is not acceptable to use chemical disinfectants to disinfect instruments (unless this is specifically recommended by the manufacturer) and therefore thermal disinfection using a washer-disinfector (WD) is necessary.
- After sterilization, how instruments are stored before use depends on the type of sterilizer and the procedures the instruments are used for.
- Some instruments cannot be steam sterilized. In these cases decontaminate according to the manufacturer's instructions.
- If sending instruments for repair or disposal, ensure they are decontaminated first.

Several factors contribute to effective decontamination, including:

- facilities for decontamination that are fit for purpose and well-organised;
- suitable equipment that is validated and undergoes periodic testing and maintenance to ensure it is functioning correctly;
- establishment of a standardised decontamination process that is followed;
- management of the process with suitable documentation;
- staff who are suitably trained in all decontamination procedures used in the practice.