

Decontamination in primary care practice – a curate's egg, good in most parts

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Decontamination means the preparation of an instrument for re-use and encompasses both cleaning and sterilisation. A survey of 200 dental practices in Scotland in 2004 showed that processes being used were unlikely to result in satisfactory decontamination.¹ To help to ensure conformity of standards in instrument decontamination, HTM 01-05 has recently been published by the Department of Health.² Two standards are distinguished in this document, essential and best practice. It is expected that all dental practices will achieve the essential standard within one year (ie by 2009) and have plans for implementing best practice within two years. By 2010 all dental practices in the UK, both NHS and private, will have to register with the Care Quality Commission and will be regulated by this body. HTM 01-05 gives the Care Quality Commission the right to inspect all practices and to see they attain these two standards.

To achieve the initial essential standard the majority of practices with decontamination areas within the surgery must make sure the workflow goes from designated dirty to clean areas; with separate washbasins for instruments and hand washing. Manual washing of instruments is to be phased out, but in the interregnum staff have to be trained to do this process effectively and safely. Ultrasonic cleaners have to be tested and to be used in a specified way, but ultimately unless they have a number of inbuilt sophisticated features they are to be replaced by washer disinfectors. All equipment used in the cleaning process must be regularly tested to ensure correct function. Sterilisation can be done in a downward displacement autoclave, but there are precise instructions in HTM 01-05 about their testing and use. Practices are required to keep validation and testing records which can be inspected and audited.

For most practices the essential standard could be achieved with a little thought, rearrangement and instigation of locally applicable written policies, staff training and audit. Other practices will need more drastic action. Within two years all dental practices have to have detailed plans to move to the best practice, which includes a separate room dedicated for decontamination purposes and washer disinfectors. In many practices where space is at a premium, this may mean a surgery loss.

A minority of recommendations in HTM 01-05 are scientifically debateable. One example is the contention that instruments which have been sterilised in non-vacuum, or vacuum,

autoclaves can only be stored for 21 and 30 days respectively. There is little scientific information to support this practice, but rotating processed instrument stock is sound. HTM 01-05 recommends that water is run through the unit to lessen the bacterial counts within the water lines; a process that does not work. At least two published reports scientifically demonstrate that bacterial contamination of dental unit water supplies can be controlled by disinfection to provide potable water,^{3,4} but HTM 01-05 categorically refutes this contention.

The stated purpose of HTM 01-05 is to drive standards upwards so that all dental practices are safely decontaminating instruments. This will require money and education. Some practices will require major changes in their decontamination processes, the purchase of washer disinfectors and extra instruments to allow for the decontamination 'downtime'. It will involve more record keeping, staff training and validation of decontamination processes. HTM 01-05 will however be the standard used in all medicolegal disputes, including those which go to the General Dental Council. It will also be the basis of 'Bolam's law' test (ie what a reasonable practitioner would be expected to do in practice).

It is easy to regard HTM 01-05 as yet another imposition on dental practitioners. It is a spin-off from the Chief Medical Officer's documents described in *Winning ways* and *Getting ahead of the curve* which are designed to improve decontamination in all aspects of public healthcare. A positive approach has to be that if dentists spend money and time on decontamination, surely for their patient's sake, they should do it by safe validated methods. HTM 01-05 will provide the assured blueprint that most dental practitioners want. This is not a document to be ignored as it will be enforced by the Care Quality Commission, but it will provide a safer environment for patients and the dental team and as such should be welcomed.

1. NHS Scotland. Survey of decontamination in general dental practice. Sterile Services Provision Review Group, 2004. <http://www.sehd.scot.nhs.uk/publications/DC20041202Dental.pdf>
2. Decontamination Health Technical Memorandum 01-05. Department of Health 2008. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_089245
3. Smith A J, McHugh S, Aitken I, Hood J. Evaluation of Alpron disinfection for dental unit water lines. *Br Dent J* 2003; **193**: 503-506.
4. Martin M V, Gallagher M A. An investigation of the efficacy of super-oxidised (Optident/Sterilox) water for the disinfection of dental unit water lines. *Br Dent J* 2005; **198**: 353-355.

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