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## HealOzone for tooth decay

Understanding NICE guidance –  
information for people with tooth decay,  
their families and carers, and the public

## Ordering information

You can download the following documents from [www.nice.org.uk/TA092](http://www.nice.org.uk/TA092)

- This booklet.
- The full guidance on this appraisal.
- A short version for healthcare professionals – the quick reference guide.
- The assessment report – details of all the studies that were looked at.

For printed copies of the quick reference guide or information for the public, phone the NHS Response Line on 0870 1555 455 and quote:

- N0895 (quick reference guide)
- N0896 (information for the public).

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## What is NICE guidance?

The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health. One of NICE's roles is to produce guidance (recommendations) on the use of medicines, medical equipment, diagnostic tests and clinical and surgical procedures within the NHS.

To produce this guidance, NICE looks at how well the medicine, equipment or procedure works and also how well it works in relation to how much it costs. This process is called an appraisal. The appraisal process involves the manufacturer of the medicine or equipment for which guidance is being produced and the organisations that represent the healthcare professionals, patients and carers who will be affected by the guidance.

NICE was asked to look at the available evidence on the use of a device called HealOzone to treat decay of the biting surfaces and roots of the teeth. NICE was asked to provide guidance that will help the NHS in England and Wales decide when HealOzone should be used.

## What is tooth decay?

Bacteria in the mouth produce acids from sugars in the diet. Tooth decay happens when these acids remove minerals from the hard outer surface (enamel) of the tooth. The area becomes weaker and a cavity (or hole) may develop eventually, causing toothache. Tooth decay can be prevented or stopped from getting worse by cutting down on sugary food and drinks, brushing regularly and using a fluoride toothpaste to help replace the dissolved minerals. Sometimes the affected area can be covered with a protective sealant to stop the decay progressing. When a cavity develops, a filling is usually needed.

## What is HealOzone?

HealOzone is a device dentists can use to treat tooth decay. The HealOzone device releases a gas called ozone. A small cup is placed over the affected tooth to form a seal, and ozone is pumped onto the tooth for up to 2 minutes. After treatment, a special liquid is dripped onto the tooth to remove any remaining ozone and acid, and help the weakened enamel start to harden again by a process called remineralisation. The person is given a kit containing fluoride in the form of toothpaste, mouthwash and mouth spray to use for several weeks, to help the remineralisation process.

## What has NICE recommended on HealOzone?

During the appraisal, NICE's Appraisal Committee read and heard evidence from:

- studies of HealOzone treatment
- dentists and doctors with specialist knowledge of tooth decay and its treatment
- individuals and organisations representing the views of people who work in NHS dental services, and people who use them
- the manufacturer of HealOzone.

The evidence is summarised in the full guidance and additional information about the studies can be found in the assessment report for this appraisal (see 'Further information' section for details).

NICE has said that HealOzone is not recommended as a treatment for specific types of tooth decay within the NHS in England and Wales, unless it is being used in a clinical trial.

The reason for this was that there was not enough reliable evidence that HealOzone is more effective than existing treatments for decay of the biting surfaces and roots of the teeth.

## Will NICE review its guidance?

The guidance will be considered for review in July 2008.

### Further information

The NICE website ([www.nice.org.uk](http://www.nice.org.uk)) has further information about NICE and the full guidance on HealOzone for tooth decay that has been issued to the NHS. The assessment report, which contains details of the studies that were looked at, is also available from the NICE website. A short version of the guidance (a 'quick reference guide') is available on the website and from the NHS Response Line (phone 0870 1555 455 and quote reference number N0895).

You can find more information about tooth decay on the NHS Direct website ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)). Click on the link to the health encyclopaedia on the home page, and look at the entry for dental decay. You can also phone NHS Direct on 0845 46 47.





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