

This document provides further explanation of aspects of the restrictions on the use of dental amalgam for the dental team, to support discussions with patients and parents or carers.

What are the new restrictions on the use of dental amalgam and why are they being introduced?

New regulations in the UK and the European Union (EU) that restrict the use of mercury came into law in 2018. The regulations are part of a worldwide agreement to reduce global environmental pollution caused by mercury released during the production, use and disposal of mercury products, including dental amalgam.

There is no evidence that dental amalgam presents a direct health risk to individuals who have amalgam restorations. However, when released into the environment, the mercury that is stably bound within dental amalgam can be converted by microorganisms into a form that can accumulate to toxic levels in fish and other marine life and enter the human food chain. Therefore, by contaminating the environment, dental amalgam can contribute indirectly to the risk to human health from mercury. Reducing the production, use and disposal of dental amalgam will help to reduce this indirect risk.

According to the new regulations, the use of dental amalgam is no longer allowed for the treatment of children under 15 years old, of pregnant or breastfeeding women or of primary teeth in any patient, unless the dental practitioner thinks that it is strictly necessary. These restrictions on the use of dental amalgam aim to help reduce environmental mercury pollution and are not a result of any safety concerns about amalgam restorations for dental patients.

As of 1 July 2018, the regulation is a legal requirement in the UK.

Why do the restrictions apply to these patient groups?

Children, pregnant and breast-feeding women have been specified by the EU for the current restrictions in dental amalgam use. Restricting the use of dental amalgam in any patient group will help to reduce mercury pollution and in children in particular will contribute towards future amalgam free patients.

The avoidance, where possible, of dental amalgam use in pregnant women has been accepted practice for a significant number of years, in line with longstanding Department of Health advice. Developing foetuses, infants and young children are generally considered to be at higher risk of theoretical harm, and so while there is no evidence that dental amalgam restorations cause any harm to the health of patients, the precautionary principle of avoidance where possible applies to them.

Why might patients of different ages in the same family be offered different treatment?

The restriction on dental amalgam use in children and young people is a legal requirement with a specific age limit, set at 15 years old by the EU regulation which is applicable in UK law. Therefore, a 14 year old patient will not be offered amalgam restorations unless the dental practitioner thinks that it is strictly necessary, while a 16 year old patient, even within the same family, may be offered dental amalgam. Legally defined age limits are used in many other contexts including in healthcare.

The same explanation applies in the situation where a patient approaching 15 years of age might receive fillings made of alternative restorative materials at one appointment then be offered dental amalgam restorations at future appointments when they are over 15 years old.

Explaining why an amalgam restoration has been advised for a patient who is included in the restrictions

It is recognised that in some situations, for some of the patients specified in the regulation, and despite the environmental concerns, the use of dental amalgam will be the only feasible treatment option to best meet the specific clinical circumstances and patient's needs. Examples include where there is an allergy or local adverse reaction to alternative materials or when it is not possible to obtain adequate moisture control or patient cooperation for the treatment required. In such cases, the patient and parent/carer should be informed of the reasons for the advice to have dental amalgam restorations and reassured that there is no evidence that the placement of a dental amalgam restoration is harmful to the health of patients, including those specified in the restrictions.

Dental amalgam restorations currently remain a treatment option for patients not specified in the new regulations and are considered to be safe.

Advice about the removal and replacement of dental amalgam restorations

There is no evidence to suggest that existing dental amalgam restorations are harmful to patient health. This includes for children, unborn or breastfeeding babies. Therefore, there is no reason to replace clinically sound dental amalgam restorations, except in patients with an allergy or adverse local reaction to any of the components of dental amalgam. Removal of sound amalgam restorations can result in unnecessary loss of tooth material.

As with any medical or dental treatment, as a precaution, it is advised that the removal of dental amalgam restorations is best avoided during pregnancy. However, it would be reasonable to remove an amalgam restoration for urgent treatment, such as the relief of pain or infection.