

SAFETY OF DENTAL AMALGAM¹

1 Introduction

- 1.1 Dental Amalgam has been used as a dental restorative material for more than 150 years. It has proved to be a durable, safe and effective material which has been the subject of extensive research over this time.
- 1.2 The FDI World Dental Federation takes the following position on amalgam safety:
- dental amalgam releases very small amounts (nanograms² - only a small percentage of the World Health Organization's acceptable daily absorption) of mercury, some of which is absorbed by the body.
 - amalgam is very efficiently excreted by the body and so the level of urinary mercury is positively correlated with the number of amalgam restorations, but can also be affected by sources other than amalgam.
 - there is no evidence to support an association between the presence of amalgam restorations and chronic degenerative diseases, kidney disease, autoimmune disease, cognitive function, adverse pregnancy outcomes or any non-specific symptoms.
 - local hypersensitivity reactions can occur on the mucosa adjacent to amalgam restorations, but are extremely rare and usually resolve on removal of the amalgam.
 - further research into the possible adverse effects of dental amalgam is desirable.
 - alternatives to amalgam may have adverse effects.
- 1.3 The National Health and Medical Research Council has attested to the value and safety of dental amalgam but has suggested that it would be prudent to reduce its use in special populations, including children, women in pregnancy and persons with existing kidney disease.
- 1.4 Despite overwhelming evidence to the contrary, some suggest that amalgam restorations should be removed and replaced with other materials because of the perceived effects of mercury.
- 1.5 **Definition**
- 1.5.1 DENTAL AMALGAM is a mixture of metals including silver, copper and tin with mercury forming an eutectic alloy.

2 Principles

- 2.1 Dentists should only use materials that are proven to be safe and are included in the Australian Register of Therapeutic Goods.

3 Policy

- 3.1 Amalgam should continue to be available as a dental restorative material.

¹This Policy Statement is linked to other Policy Statements: 2.1 National Oral Health, 2.4 Research, 6.11 Dental Amalgam Waste Management, 6.19 Minimal Intervention Dentistry & 6.21 Dentistry and Sustainability.

² 1/1,000,000,000 gram

- 3.2 Amalgam restorations should not be removed and replaced with alternative restorative materials for non-specific or perceived health complaints unless the patient has been fully informed of the implications of this decision.
- 3.3 Dentists should minimize the use of amalgam in children, pregnant or breastfeeding women and in individuals with kidney disease.
- 3.4 Only capsulated amalgam should be used in dental clinics.

Policy Statement 6.18

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