

Policy Statement 6.18 – 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 time¹.
- 1.2 The FDI World Dental Federation's position on amalgam safety includes the following:
 - Dental amalgam releases very small amounts (nanograms²) of mercury, some of which is absorbed by the body;
 - 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 resolved on removal of the amalgam;
 - Further research into the possible adverse effects of dental amalgam is desirable; and
 - 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.³
- 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 adverse health effects of mercury.

Definitions

- 1.5 **DENTAL AMALGAM** is a mixture of metals including silver, copper and tin with mercury forming a 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 Dental amalgam should continue to be available as a dental restorative material.
- 3.2 Dental 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 minimise the use of dental amalgam in children, pregnant or breastfeeding women and in individuals with kidney disease.
- 3.4 Only capsulated dental amalgam complying with ISO 24234:2015 'Dentistry - Dental amalgam' should be used in dental clinics.
- 3.5 Dental clinics should practice mercury hygiene and correctly dispose of dental amalgam waste.

¹ This 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

¹ Scientific Committee on Emerging and Newly Identified Health Risks (SCENHR) http://ec.europa.eu/health/ph_risk/committees/04_scenihhr/docs/scenihhr_o_016.pdf. Accessed 2016-10-16 Scientific Committee on Emerging and Newly Identified Health Risks (SCENHR) http://ec.europa.eu/health/ph_risk/committees/04_scenihhr/docs/scenihhr_o_016.pdf. Accessed 2016-10-16 Scientific Committee on Emerging and Newly Identified Health Risks (SCENHR) http://ec.europa.eu/health/ph_risk/committees/04_scenihhr/docs/scenihhr_o_016.pdf. Accessed 2016-10-16 Scientific Committee on Emerging and Newly Identified Health Risks (SCENHR) http://ec.europa.eu/health/ph_risk/committees/04_scenihhr/docs/scenihhr_o_016.pdf. Accessed 2016-10-16

² 1/1,000,000,000 gram

³ <https://www.nhmrc.gov.au/guidelines-publications/oh17>.

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