

Amalgam (Part 1): Safe Management of Waste and Mercury: Adopted by the FDI General Assembly: 27-29 September 2021, Sydney, Australia.

Title: Amalgam (Part 1): Safe Management of Waste and Mercury: Adopted by the FDI General Assembly: 27-29 September 2021, Sydney, Australia.

Publication year: 2022

Journal: International dental journal

Society: FDI World Dental Federation

Origin country: International

Target countries: International

DOI: 10.1016/j.identj.2021.11.008

PMID: 35074198

Source: <https://pubmed.ncbi.nlm.nih.gov/35074198/>

pmc Int Dent J Int Dent J 4261 intdentj 0374714 International Dental Journal 0020-6539 1875-595X Elsevier PMC9275342 PMC9275342.1 9275342 9275342 35074198 10.1016/j.identj.2021.11.008 S0020-6539(21)00258-6 1 Policy Statement Amalgam (Part 1): Safe Management of Waste and Mercury Adopted by the FDI General Assembly: 27-29 September 2021, Sydney, Australia. 2 2022 21 1 2022 72 1 412288 10 11 21 01 2022 02 08 2022 03 08 2022 © 2022 Published by Elsevier Inc. on behalf of FDI World Dental Federation. 2022 <https://creativecommons.org/licenses/by-nc-nd/4.0/> This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). **KEYWORDS** Amalgam waste mercury amalgam separator amalgam capsules pmc-status-qastatus 0 pmc-status-live yes pmc-status-embargo no pmc-status-released yes pmc-prop-open-access yes pmc-prop-olf no pmc-prop-manuscript no pmc-prop-legally-suppressed no pmc-prop-has-pdf yes pmc-prop-has-supplement no pmc-prop-pdf-only no pmc-prop-suppress-copyright no pmc-prop-is-real-version no pmc-prop-is-scanned-article no pmc-prop-preprint no pmc-prop-in-epmc yes pmc-license-ref CC BY-NC-ND **CONTEXT** The existing FDI Policy Statements on amalgam Waste Management (2006, revised 2009) and Mercury Hygiene (1998, revised 2007) are updated by and integrated into this Policy Statement. The policies are meant to protect the health of patients, dentists and dental teams. Furthermore, they are formulated to comply with the efforts of the Minamata Convention to minimize the anthropogenic emission of mercury into the environment.

This Policy Statement provides the generally recognized instructions for best practices in safe handling of waste and mercury from dental amalgam, in order to safeguard the health of patients, dentists and dental teams and to protect the environment.

Minamata Convention on Mercury: an international treaty, developed by the United Nations Environment Programme, governing the mining, trade in and use of mercury.

Dental amalgam: filling material for teeth prepared by mixing mercury with dental amalgam alloy. 1

Dental amalgam alloy: powder or compressed powder pellets of an alloy consisting mainly of silver, tin and copper which, when mixed with mercury, produces dental amalgam. 1

FDI supports the World Health Organization for minimizing mercury-related risks for patients, dentists and dental teams and the environment during placement and removal of dental amalgam.

Oral health staff should be trained to minimize the amount of mercury-containing waste and adopt best management practices for ensuring that all generated waste is properly disposed of in

accordance with the applicable environmental legislation.

All amalgam waste, including used amalgam capsules, excess amalgam not used for a restoration, amalgam captured in chairside filters, vacuum pump filters and amalgam separators should be collected and stored safely pending forwarding to a licensed mercury recycling company.

Extracted teeth restored with amalgam should also be recycled with other types of amalgam waste.

Amalgam separators complying with ISO 11143 2 should be installed in dental clinics and dental treatment units where dental amalgam is used and/or removed.

Oral health staff should be trained in the correct and safe handling of mercury and dental amalgam, and the following rules should be followed: • Use only single-use encapsulated amalgam complying with ISO 20749:2017 Dentistry — Pre-capsulated dental amalgam 3 ;

Avoid direct skin contact with mercury and freshly mixed dental amalgam;

Use high-volume evacuation systems and water-cooling during polishing or removal of amalgam;

Recap single-use capsules after using them;

Store used capsules and amalgam scrap in a closed container and dispose of them through appropriate means of mercury reclamation;

Clean amalgam contaminants from instruments prior to heat sterilization or heat disinfection;

Do not use bleach or other chlorine-containing cleaners to flush wastewater lines.

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.