



FDI POLICY STATEMENT

Amalgam (Part 1): Safe Management of Waste and Mercury

Adopted by the FDI General Assembly: 27-29 September 2021, Sydney, Australia

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CONTEXT

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The existing FDI Policy Statements on amalgam waste management (2006, revised 2009) and mercury hygiene (1998, revised 2007) are updated and integrated. 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.

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SCOPE

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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.

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DEFINITIONS

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

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

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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

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PRINCIPLES

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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.

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32 **POLICY**

33 **Waste**

34 Oral health staff should be trained to minimize the amount of mercury-containing
35 waste and adopt best management practices for ensuring that all generated waste
36 is properly disposed of in accordance with the applicable environmental legislation.

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

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

43 Amalgam separators complying with ISO 11143² should be installed in dental clinics
44 and dental treatment units where dental amalgam is used and/or removed.

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46 **Mercury Hygiene**

47 Oral health staff should be trained in the correct and safe handling of mercury and
48 dental amalgam, and the following rules should be followed:

- 49 • Use only single-use encapsulated amalgam complying with ISO
50 20749:2017 Dentistry — Pre-capsulated dental amalgam³;
- 51 • Avoid direct skin contact with mercury and freshly mixed dental amalgam;
- 52 • Use high-volume evacuation systems and water-cooling during polishing
53 or removal of amalgam;
- 54 • Recap single-use capsules after using them;
- 55 • Store used capsules and amalgam scrap in a closed container and
56 dispose of them through appropriate means of mercury reclamation;
- 57 • Clean amalgam contaminants from instruments prior to heat sterilization
58 or heat disinfection;
- 59 • Do not use bleach or other chlorine-containing cleaners to flush
60 wastewater lines.

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62 **KEYWORDS**

63 Amalgam waste, mercury, amalgam separator, amalgam capsules
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65 **DISCLAIMER**

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

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70 **REFERENCES**

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