Draft Guidance on Developing a National Action Plan to Phase Out Dental Amalgam

I. Introduction

1. Background

The Minamata Convention on Mercury has progressively strengthened its provisions on dental amalgam from an initial phase-down approach towards a phase-out. Part II of Annex A to the Convention initially established a set of measures to phase down the use of dental amalgam, taking into account domestic circumstances and relevant international guidance. These measures address, inter alia, national objectives, mercury-free alternatives, education and training, insurance policies and programmes, encapsulated dental amalgam and environmental practices in dental facilities.

Additional requirements concerning the use of dental amalgam entered into force[1] on 28 September 2023. Parties are required, as applicable, to exclude or not allow the use of mercury in bulk form by dental practitioners. They are also required to exclude, not allow or recommend against the use of dental amalgam for the dental treatment of deciduous teeth, patients under 15 years and pregnant and breastfeeding women, except when considered necessary by the dental practitioner based on the needs of the patient (hereafter, the "Children's Amendment").

Since 25 April 2025, Parties that have not yet phased out dental amalgam are also required to submit every four years, as part of national reporting under Article 21, either a national action plan or a report based on available information on progress made towards phasing down or phasing out dental amalgam. The Conference of the Parties, in decision MC-6/13, invited Parties to submit completed national action plans on the phase-out of dental amalgam either together with their second full national reports, due by 31 December 2025, or with their third short national reports, due by 31 December 2027. No Party submitted a national action plan by 2025.

The Conference of the Parties, in decision MC-6/3, adopted further amendments to part I and part II of Annex A, which entered into force on 23 March 2027. The amendments, under part I, established a phase-out date of 2034 for the manufacture, import and export of dental amalgam, except when its use is considered necessary by the dental practitioner based on the needs of the patient. It decided to review the need for this exception at its twelfth meeting in 2037. Under part II, Parties that have not yet phased out dental amalgam shall take measures, as appropriate, to not allow, or significantly phase down, dental amalgam unless its use is considered necessary by the dental practitioner based on the needs of the patient.

Against this background, the Conference of the Parties, in decision MC-6/13, requested the Secretariat to prepare guidance on developing a national action plan to phase out dental amalgam.

2. Purpose of this guidance

The purpose of this guidance is to assist Parties in developing and implementing a national action plan towards the phase-out of dental amalgam. The plan can provide a framework for implementing

[1] Amendments to the annexes, including the two subsequent amendments mentioned in this section, do not apply to a party that has notified the depositary of non-acceptance in accordance with article 27, paragraph 3. For Parties that have made a declaration under article 30, paragraph 5, an amendment enters into force only upon deposit of an instrument of ratification, acceptance, approval or accession.

the requirement to take measures, as appropriate, to not allow or significantly phase down dental amalgam, unless its use is considered necessary by the dental practitioner based on the needs of the patient.

Parties that have not phased out dental amalgam are to submit a national action plan on phase-out together with the third short national reports due by 31 December 2027, pursuant to decision MC-6/13. Pursuant to the amended Annex A part II of the Convention, Parties that have not phased out dental amalgam are to submit an updated plan or report every four years thereafter. This guidance is intended to help by presenting possible contents of the national action plans and considerations on developing, updating and implementing those plans.

The guidance draws upon information on the Parties' experience in phasing down and out dental amalgam obtained from national reports and other submissions under the Convention, national legislation and policies, international projects and workshops, and guidance of the World Health Organization.

The guidance does not provide legally binding requirements. Parties may follow different approaches depending on their national circumstances and the measures already under consideration.

II. Possible contents of national action plans

The national action plan is to describe measures that Parties will take towards the phase-out of dental amalgam. A typical plan may include the following:

- Assessment of the national situation
- Specific measures to phase out dental amalgam
- Timelines, milestones and responsibilities
- Monitoring and reporting arrangements

Parties may wish to develop and submit an initial action plan to phase out dental amalgam, and then update the plan for submittal along with the succeeding national reports.

In case where the national situation is already well understood for taking phase-out measures, Parties may choose to start the national action plan with the description of specific measures.

The following sections present possible approaches to develop the plan.

1. Assessment of the national situation

The development of a national action plan may begin with an assessment of the current national situation. The assessment may identify the extent and main settings of remaining dental amalgam use, measures already in place and the issues that may need to be addressed in completing the transition to mercury-free restorative care.

The assessment may consider:

- the extent and main settings of dental amalgam use, including in public and private dental services;
- domestic manufacture of dental amalgam or dependence on imports, including supply and distribution arrangements;

- the role of dental amalgam and mercury-free restorative materials in publicly financed dental programmes, reimbursement systems and public procurement;
- the availability of appropriate mercury-free restorative materials, and existing professional capacity and dental education;
- existing measures, restrictions, policies or programmes concerning dental amalgam, including relevant authorities and coordination arrangements; and
- available information on the generation and management of amalgam waste.

The assessment of the national situation may make use of national reports and Minamata Initial Assessments, public procurement and reimbursement data, information from health authorities, public dental programmes, manufacturers, importers and distributors, customs statistics, dental schools and professional organizations, and existing national surveys or studies. Where quantitative information on dental amalgam use is limited, these sources may provide sufficient indicators of the scale and pattern of remaining use. Targeted consultation, surveys or additional data collection may be useful where important information gaps remain, but the lack of comprehensive data should not delay the development of a national action plan.

2. Specific measures to phase out dental amalgam

Measures to phase out dental amalgam may include regulatory restrictions on its use and supply, alongside measures to facilitate the transition to mercury-free restorative care. The selection and sequencing of these measures may be informed by the national assessment and adapted to national circumstances.

2.1. Regulatory measures

Under the Minamata Convention, the manufacture, import and export of dental amalgam are to be phased out by 2034, subject to limited exceptions for medical needs. Parties may also consider regulatory measures on the use of dental amalgam, noting that ending manufacturing and import does not immediately end the use of dental amalgam, as existing stocks may continue to be used for years.

Experience from countries that have phased out dental amalgam shows that different legal and administrative approaches can be used and that a separate stand-alone law on dental amalgam may not be necessary. Depending on the national system, measures have been implemented through mercury or chemicals legislation, health or medical-device regulation, ministerial orders or circulars, professional or health-facility regulation, import and procurement controls, or combinations of these approaches. Existing mercury or chemicals legislation may also provide a framework for assigning responsibilities and requiring specific measures by health authorities. The choice of instrument may reflect the measures to be implemented and the existing legal framework, including provisions for compliance monitoring, enforcement and the specification of penalties for violations.

A regulatory approach may establish a direct prohibition or provide for a stepwise transition towards phase-out. Experience from different countries shows that transitional measures may include restrictions on the use of dental amalgam for vulnerable groups, an earlier end to imports or procurement, or time-limited exceptions. Such measures may be introduced separately or combined within a regulatory framework that establishes a national phase-out date. Regulatory measures may also require designated authorities, health facilities or other responsible actors to develop and implement phase-out plans with defined timelines and transitional arrangements.

Introducing binding restrictions on the use of dental amalgam for children under 15 and pregnant and breastfeeding women as a first step can help establish mercury-free restorations as standard care in public dental programmes and support corresponding changes in dental education and professional training.

Where stocks remain after use has been discontinued, arrangements may be needed for their collection and environmentally sound management in accordance with applicable requirements. Considering the management of remaining stocks when planning the end of supply and use can help avoid the accumulation of obsolete dental amalgam in dental facilities.

2.2. Measures to facilitate the transition to mercury-free restorative care

This section describes measures that may be required to phase down and phase out dental amalgam while protecting the oral health.

Since the introduction of resin-based composites in the 1960s and glass ionomer cements in the 1970s, mercury-free restorative materials have become increasingly established in dental practice. Some countries began promoting their use through clinical recommendations and public dental programmes as early as the 1990s. Growing demand for tooth-coloured restorations also supported their widespread adoption in private dental practice. Continued advances in materials and techniques, corresponding developments in dental education, and the phase-down measures introduced under the Minamata Convention have further supported this transition.

Today, restorative dental care in most countries already relies largely on mercury-free materials, and dental professionals can generally be expected to have experience with at least some of the available materials and techniques.

This transition is further supported by the inclusion of glass ionomer cements and resin-based composites in the WHO Model List of Essential Medicines and the WHO Global Oral Health Action Plan 2023–2030, which promotes their integration into universal health coverage. WHO has further released a guideline on environmentally friendly and less invasive oral health care, providing evidence-based recommendations for mercury-free restorative treatment.

Despite the widespread use of mercury-free restorative materials, the transition away from dental amalgam may still present a challenge, particularly in some public dental programmes. Adapting public programmes requires decisions on appropriate restorative treatments and their reimbursement, taking into account the interests of patients, providers and public financing systems.

In countries where restorative dental care is largely privately financed or public coverage is limited, the continued use of dental amalgam may reflect individual clinical preferences, established practices or concerns about the performance and cost of alternative materials. Clinical guidance and professional training may help address established practices and concerns about alternative materials. Where material costs or availability remain barriers, measures concerning procurement, distribution and product registration, or specific import arrangements, may facilitate the transition.

Based on the national assessment and experience from other countries, Parties may identify transitional measures to facilitate the phase-out. These may include (1) introducing mercury-free alternatives in public programmes in place of dental amalgam or alongside it as an initial step, offering patients an informed choice; (2) adapting central procurement arrangements for mercury-free restorative materials while discontinuing dental amalgam purchases; and (3) discontinuing practical training with dental amalgam at dental schools.

Experience from countries that have already undertaken the transition demonstrates that mercury-free restorative care can be integrated into public dental programmes under different financing models, including full or partial reimbursement, coverage limited to particular population groups, or reimbursement restricted to certain materials and techniques for basic restorative care. The transition does not necessarily require major increases in public expenditure for restorative treatments or additional out-of-pocket payments by patients.

When considering adjustments to public dental programmes, the financial and environmental burden associated with dental amalgam use, as well as the benefits of minimally invasive, mercury-free restorative care, should be taken into account.

2.3. Other phase-down measures

The phase-down measures established under Part II of Annex A to the Minamata Convention also include dental caries prevention and oral health promotion, research and development of mercury-free restorative materials, and the promotion of best environmental practices in dental facilities. These measures may complement national phase-out efforts.

Preventive oral health care can reduce the need for dental restorations and contribute to long-term reductions in the demand for restorative materials. Parties may build on existing national oral health strategies and programmes, including those aligned with the WHO Global Oral Health Action Plan 2023–2030. Research on mercury-free restorative materials and techniques may also support their wider use, particularly where specific clinical or practical challenges remain.

The environmentally sound management of dental amalgam waste remains relevant during and after the phase-out. Depending on national circumstances, Parties may review existing arrangements for the collection, storage, transport, treatment and final disposal of hazardous dental waste containing mercury, including remaining stocks of unused dental amalgam. Where gaps are identified, practical solutions may include integrating dental waste into existing hazardous or health-care waste management systems or establishing shared collection and disposal arrangements.

For countries with limited waste management infrastructure, transporting mercury-containing dental waste safely to suitable treatment or final disposal facilities abroad can be particularly challenging and costly. In such circumstances, the costs and practical requirements of waste management may provide an additional argument for an earlier phase-out of dental amalgam use, thereby reducing the associated risk of pollution and the long-term management burden.

3. Timelines, milestones and responsibilities

A national action plan should define a national phase-out objective and target date, taking into account the national assessment and the measures identified. A defined phase-out date can provide a clear endpoint for the transition and guide the implementation of individual measures.

Based on the identified priorities, Parties may establish concrete milestones and timelines for implementing selected measures, including regulatory decisions and transitional arrangements. Assigning responsibilities to the relevant authorities and other actors can help turn these measures into actionable commitments and facilitate coordination across sectors.

4. Monitoring and reporting arrangements

The national action plan may establish practical arrangements for monitoring implementation and progress towards the phase-out. It may identify the information needed, the authorities responsible for collecting or reviewing it, and arrangements for reporting progress at national level. These arrangements may include appropriate indicators, available baseline information, targets and reporting frequency, as relevant to the measures included in the plan. Existing administrative and regulatory systems may be used wherever possible.

Depending on the national pathway, implementation may be monitored through public procurement and reimbursement data, regulatory or market surveillance, inspections of dental facilities, information on domestic manufacture and remaining supply, and customs data.

For Parties that import or export dental amalgam, customs data can provide a practical means of monitoring remaining supply. Dental amalgam is to be traded under Harmonised Systems (HS) code 2843.90 for amalgam, avoiding declaration under HS 3006.40 for dental cements and other dental fillings.[2] This six-digit code does not currently distinguish dental amalgam from other compounds and amalgams classified under the same code. Parties may therefore consider establishing a dedicated national tariff or statistical subdivision under HS 2843.90 for dental amalgam containing mercury, in capsules or other forms for dental use. While national customs nomenclatures beyond the six-digit level may differ, the use of a common product description and, where feasible, similar statistical suffixes could facilitate consistent identification and comparison of trade data.

Where import restrictions provide for exemptions, appropriate declaration or documentation requirements may support the implementation of the restrictions.

Monitoring arrangements enable authorities to determine whether the measures and milestones established in the national action plan are being implemented and whether additional action is needed to achieve the national phase-out date. The findings may inform subsequent updates of the national action plan and reporting under Article 21 of the Convention.

III. Considerations on developing, updating and implementing the plans

The development, update and implementation of the national action plan require the involvement of relevant authorities and stakeholders. While overall responsibility for coordinating the plan may rest with one authority, effective implementation may require the involvement of authorities responsible for health, environment, public financing and reimbursement, procurement, education, trade or chemicals regulation, depending on the national circumstances.

Consultation with relevant stakeholders can help validate the findings of the national assessment, identify practical issues that need to be addressed and inform the selection and design of appropriate measures. Relevant stakeholders may include dental professional organizations, public and private dental service providers, dental schools, health insurance or reimbursement bodies, suppliers and distributors of dental materials and, where appropriate, civil society organizations.

Based on the national situation, Parties can identify and prioritize the measures needed to achieve the phase-out, taking into account their expected impact, feasibility and national circumstances. Experience from other countries can help identify practical approaches and solutions to barriers encountered.

[2] See UNEP/MC/COP.3/INF/12 for the classification of mercury-containing dental amalgam under Chapter 28 rather than HS 3006.40. See also the judgment of the General Court of the European Union of 25 February 2026, Case T-69/25 (ECLI:EU:T:2026:151), concerning two-component dental amalgam capsules.