



Health sector in the implementation of the the Minamata Convention on mercury Kingston, Jamaica, 18-19 October 2016

WHO experiences and PAHO's oral health plan

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Overview

- Current status of dental amalgam
- Activities
- Minamata Convention: dental amalgam
- Projects to phase down dental amalgam
- PAHO's oral health plan
- Resources



Dental amalgam: current status

- Dental amalgam is still widely used
- The choice of materials for dental caries management depends on: tooth, site and size of caries lesion, healthcare provision, financing and preference, patient preference, technology available, cost and environmental factors



Dental amalgam: current status

- Current existing methods and materials would need to remain available in the short and medium terms
- Alternative restorative materials are desirable from an environmental health perspective, however, a progressive move away from dental amalgam would be dependent on adequate quality of alternative materials – quality needs to be further improved for use in public health care



Activities

- WHO, in cooperation with UNEP, organized an expert group meeting in Geneva on the "Future use of materials for dental restoration" in 2009
- "Phase down" of dental mercury use worldwide was recognized



Activities

- Effects of mercury on health and the environment
- Best management practices for amalgam waste
- Training of dental health professionals
- Country experience from all WHO regions

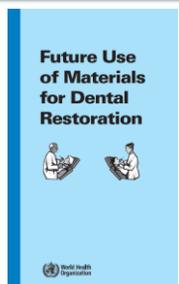


Table 4. Best Management Practices for dental offices using amalgam.

DO	DONT
Do use pre-encapsulated alloys and stock a variety of capsule sizes	Don't use bulk mercury
Do recycle used disposable amalgam capsules	Don't put used disposable amalgam capsules in biohazard containers, infectious waste containers or regular garbage
Do salvage, store and recycle non-contact amalgam (scrap amalgam)	Don't put non-contact amalgam waste in biohazard containers, infectious waste containers or regular garbage
Do salvage (contact) amalgam pieces from restorations after removal and recycle the amalgam waste	Don't put contact amalgam waste in biohazard containers, infectious waste containers or regular garbage
Do use chair-side traps, vacuum pump filters and amalgam separators to retain amalgam and recycle their contents	Don't rinse devices containing amalgam over drains or sinks
Do recycle teeth that contain amalgam restoration. (Note: Ask your recycler whether or not extracted teeth with amalgam restorations require disinfection)	Don't dispose of extracted teeth that contain amalgam restorations in biohazard containers, infectious waste containers, sharps containers or regular garbage
Do manage amalgam waste through recycling as much as possible	Don't flush amalgam waste down the drain or toilet
Do use line cleaners that minimize dissolution of amalgam	Don't use bleach or chlorine-containing cleaners to flush wastewater lines

The Minamata Convention and dental amalgam
10 October 2013



The Convention's provisions for dental amalgam - a mercury-added product containing 50% mercury - make it highly relevant to the dental profession

Dental amalgam is the only mercury-added product subject to a phase-down

Mercury-added products	Provisions
Dental amalgam	<p>Measures to be taken by a Party to phase down the use of dental amalgam shall take into account the Party's domestic circumstances and relevant international guidance and shall include two or more of the measures from the following list:</p> <ul style="list-style-type: none"> (i) Setting national objectives aiming at dental caries prevention and health promotion, thereby minimizing the need for dental restoration; (ii) Setting national objectives aiming at minimizing its use; (iii) Promoting the use of cost-effective and clinically effective mercury-free alternatives for dental restoration; (iv) Promoting research and development of quality mercury-free materials for dental restoration; (v) Encouraging representative professional organizations and dental schools to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices; (vi) Discouraging insurance policies and programmes that favour dental amalgam use over mercury-free dental restoration; (vii) Encouraging insurance policies and programmes that favour the use of quality alternatives to dental amalgam for dental restoration; (viii) Restricting the use of dental amalgam to its encapsulated form; (ix) Promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

The Convention sets out nine provisions for its use



WHO and UNEP are initiating demonstration projects to phase down dental amalgam in different regions of the world

Priority areas

1. Strengthen oral health promotion and disease prevention
2. "Phase down" instead of "Phasing out"
3. Research and development of quality alternative materials
4. Environmentally sound management of waste in dental clinics
5. Promotion of measures to reduce releases during trade and supply as well as from dental clinics
6. Strengthen the awareness of the general public to dental amalgam alternatives
7. Training dental professionals

The East Africa Dental Amalgam Phase-Down Project (EADAP)

- Focused on three countries: Kenya, Tanzania and Uganda
- Aimed at demonstrating the phase-down approach of dental amalgam use in low-income countries
- The project examined supply and trade patterns, raised awareness of preventive dental care, encouraged alternatives and promoted environmentally sound waste management practices

Outputs

- 196 dental personnel benefitted from capacity building and training activities in the three countries
- Topics: hazards of mercury; oral health promotion and clinical preventive dentistry, promotion of alternatives, and environmentally sound management (ESM) of waste
- Dental amalgam separators were installed in 3 dental care facilities (including government, private, and academic institutions) in each country

Awareness raising materials

- WHO and UNEP created flyers and posters to raise awareness on dental amalgam and its impact on the environment, targeting Ministries of Health, chief dental officers, national dental associations, dentists and patients



PAHO's Oral Health Plan

Caries Free Communities Initiative:

- 8 year plan to combat burden of caries
- Reduce the burden of oral disease by 2015
- Reduction of the number of infections and increasing the coverage of services in the most vulnerable populations in the Region of the Americas

Caries Free Communities Initiative

Diagnosis and prevention challenges are related to the oral health strategies and plan of action of PAHO in the oral cavity, the impact of caries in the Region of the Americas, and with a view of facilitating the collaboration among the Ministries of Health, both in the public and private sectors in order to identify vulnerable populations and the associated needs.

The Caries Free Communities Initiative (CFCI) is an eight year plan that represents a priority response aimed to reduce the oral burden of caries throughout the Americas, the primary goal of the initiative is to reduce the oral burden of caries in the year 2015 by increasing the coverage of infection and decreasing the coverage of caries in PAHO's member countries in the Region of the Americas. Activities are organized in the form of action, diagnosis and public health care (CFCI).

SEALS:

- Seal 01: Review a degree of dental diagnosis and have oral health for all through community diagnosis based on the oral assessment of the oral conditions.
- Seal 02: Integrate the oral health component in the process of Primary Health Care (PHC).
- Seal 03: Increase initial Caries-Free Intervention (CFI) of recent cases of caries prevention in the primary and secondary prevention of oral health with the community.

ACTION PLAN:

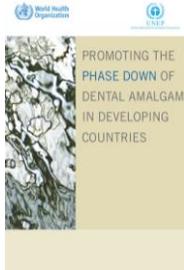
- Phase 1: Review oral health with the public and private sectors that conduct the diagnosis and ensure that availability for identifying the most vulnerable population.
- Phase 2: PHC health representation (community) to allow access to PHC, among targeted communities by the year 2015.
- Phase 3: Empowerment of the community and local health authorities, members of the community to oral health care, training and health promotion of regular oral care, diagnosis and prevention of oral health.

If you would like to participate in the initiative please contact the Working of Ministers of Health, Public Health Institutions, and oral health care team and request the relevant forms.

For more information on the objectives of the work in the initiative visit: www.paho.org

Dental amalgam phase down is possible in developing countries by:

- Creating awareness of its environmental risks
- Promoting alternatives for dental amalgam when clinically indicated
- Building capacities of dentists on oral health promotion and disease prevention
- Supporting best management practices and environmentally sound management of waste (recycling and use of facilities for hazardous waste storage and treatment)
- Ensuring regulatory framework and legislation are in place

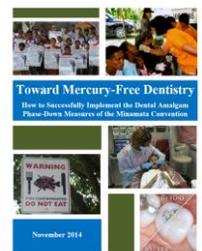


Dental amalgam phase down is possible in developing countries by:

How to implement this amalgam phase-down measure

Nations can set objectives for minimizing amalgam use by following these key steps:

1. **Engage stakeholders:** To obtain input from a variety of perspectives, consult stakeholders including dentists who do not use amalgam, dentists who do use amalgam, dental patient groups, and environmental organizations, among others. This consultation can take many forms, such as meetings, workshops, public hearings, interviews, questionnaires, or written comments.
2. **Establish baseline amalgam usage data:** To learn how much amalgam is currently used, nations can (1) determine the average amount of amalgam used per unit by one dentist and then multiply that amount times the number of dentists in the nation or (2) ask amalgam manufacturers or distributors to report how much amalgam they sell in the nation annually.
3. **Set goals:** To ensure steady progress, nations can set both long-term goals and short-term goals. For example, the long-term goal could be to phase out amalgam use completely. But a short-term goal might be to reduce amalgam use by 25% each year or to end its use in children and pregnant women by a date certain.
4. **Develop a plan:** To achieve the above goals, nations can develop plans of action that define the amalgam phase-down strategies best suited to their needs, abilities, and domestic circumstances.
5. **Announce goals and plan:** To increase cooperation and support from stakeholders, nations can publicly announce (via press releases and other strategies) their commitment to minimizing amalgam use.
6. **Track progress:** To determine amalgam use reductions over time, it is important to continue tracking the amount of amalgam used at regular intervals.



World Alliance for Mercury-Free Dentistry

Third-party payment systems

- In most countries having third-party payment systems dental schemes do not yet recognize the use of alternative materials
- In most low and middle income countries the use of alternative materials for restoration of tooth structure, dental fillings or build-up material is preferred because of its higher cost
- Dental restoration prohibitive costs may lead to tooth extraction in the case of dental pain or discomfort
- In order to effectively switch to non-amalgam materials, it will be mandatory to have health insurance companies/parties incorporate reimbursement mechanisms giving higher economic support to patient dental care using non-amalgam material (This can only become established through direct work with Ministry of Health)

Important national government/health authority elements

Activity proposed by Professor Poul Erik Petersen, WHO Oral Health Consultant

1. Formulation of national goals for prevention of dental caries
2. Formulation of relevant national health surveillance system
3. National monitoring system for measurement of reduction in the use of dental amalgam

