Dental restorative materials and the Minamata Convention on Mercury
Guidelines for successful implementation
Part 1: Executive summary

Scope of the present document

These Guidelines for Successful Implementation are designed to:

1. Equip members of national dental associations (NDAs) with the necessary knowledge about the contents and provisions of the recently-agreed Minamata Convention on Mercury for their meetings with politicians, government officials, the media and other stakeholders;
2. Advise NDAs about the obligations and opportunities for the dental sector derived from the commitments and provisions of the Minamata Convention on Mercury.

The Minamata Convention on Mercury

The Minamata Convention on Mercury (called hereafter ‘the Convention’) provides controls and reductions across a range of products, processes and industries where mercury is used, released or emitted. These include medical equipment such as thermometers and energy-saving light bulbs as well as the mining, cement and coal-fired power sectors. Mercury released to water or air can enter the environment where it can be converted to methylmercury and be concentrated in the human food chain.

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 a key restorative material in the fight against dental caries, the cause of tooth decay, which afflicts 90 percent of the world’s population, making it a global public health issue.

Dental amalgam is the only mercury-added product subject to a phase-down. All other uses of mercury in products addressed in the Convention are subject to a ban or phase-out, i.e. a ban to take effect at a later date. The Convention does, however, set out nine provisions for its use.

Note: The Convention should not lead to any changes in the availability of dental amalgam in the immediate future. However, in the longer-term, restrictions in mercury sourcing and trade in Article 3: Mercury supply sources and trade, are likely to have an impact on the availability and cost of the base product mercury and hence, on amalgam.

Commitments and responsibilities

During the negotiations, the dental profession demonstrated its commitment and responsibility to:

- Protect and maintain the gains in public health.
- Introduce measures that will continue to improve (oral) health care worldwide.
- Strengthen environmental stewardship through the promotion and adoption of an environmentally sound lifecycle management approach.

This commitment comes at a time when the dental profession is considering a paradigm shift from a restorative to a prevention-based model of oral-health care. A number of models already exist, including the FDI’s Global Caries Initiative. This transformation will, over time, lead to a sustainable long-term strategy to address the various safety, efficacy and environmental impacts of all dental restorative materials, including dental amalgam.
Impact on the dental profession

Dental professionals living in a country that has ratified the Convention need to be aware of the direct impact this will have on their profession. In addition, national dental associations (NDAs), their partners and individual dental professionals have a critical role to play in ensuring that the impact is positive. They should take an active role by helping inform governments about opportunities to improve health and protect the environment within the context of the Convention without diminishing the importance of clinically proven, cost-effective and affordable oral-health care. Advocacy and media activities to achieve this goal are presented in Parts 5 to 7, pages 11 to 17.

The next few years will see the implementation stage (2014 to 2017), to be monitored by what the Convention calls the ‘Conference of the Parties’. The expected result for dental amalgam is a reduction in demand through increased efforts: at prevention, to use alternative materials where clinically indicated and to research improved alternative materials. NDAs should lead these efforts: failure to reduce demand, hence use, of dental amalgam could result in a reconsideration of the special treatment and increased pressure for an outright ban.

It is now up to the members of the oral health profession to develop ways and means to demonstrate their understanding of the issues and commit to its undertakings in the field of prevention, research and the development of new materials as outlined in the Convention under Annex A, Part II [see page 8].

Key partners in phasing down the use of amalgam

- Policy makers and national health authorities
- Third-party payment systems
- FDI World Dental Federation
- International Association for Dental Research (IADR)
- Dental manufacturers
- WHO and UNEP

Entry into force of the Minamata Convention on Mercury

‘The Convention shall enter on the ninetieth day after the date of deposit of the fiftieth instrument of ratification, acceptance, approval or accession.’ (Article 31, item 1)

Non-ratification

The Convention enters into force 90 days after it has been ratified by 50 countries, but only in the ratifying countries. As of 1 November 2013, over 100 countries have signed the Convention.

However, NDAs need to be aware that groups could continue to lobby (1) within a non-signatory country, for the non-ratification of the Convention or a ban or phase-out of permitted products such as dental amalgam or (2) within a signatory country, for a review of the provisions on dental amalgam under Article 4, item 8 [see Appendix B, page 21].