

CED Resolution

Dental Amalgam 2019 Update

NOVEMBER 2019

I - INTRODUCTION

The Council of European Dentists (CED) is a European not-for-profit association which represents over 340,000 dentists across Europe. The association was established in 1961 and is now composed of 32 national dental associations from 30 European countries.

II - IMPORTANCE OF PREVENTION

CED, as the authoritative and independent voice of the dental profession in Europe, calls on governments to foster and ensure the phase up of effective dental caries prevention and health promotion programmes. This should be linked to preventive disease management, which will result in the phase down of the use of current restorative materials, including dental amalgam. The pace of improvement of oral health will vary from country to country depending on factors such as the level of existing disease, particularly in disadvantaged communities, and the investment of national governments in implementing prevention measures and supporting health promotion.

In this regard, CED has drafted a [White Paper Oral Care: Prevention is better than cure](#) in May 2019, which highlights the importance of prevention in oral care.

Dental caries is a preventable disease. Current disease levels in many countries of the world are, however, costly both in financial terms and in damage to health and wellbeing. Investment in prevention and attention to measures, for example, to restrict the use of dietary sugar will assist countries in reducing the level of dental caries and consequently the need for restorative treatment.

III - ENVIRONMENTAL CONSIDERATIONS

The CED welcomed the adoption of the 2014 SCHER (Scientific Committee on Health and Environmental Risks) scientific opinion on the environmental risks and indirect health effects of mercury in dental amalgam, noting that the opinion stated that:

- *only in the worst-case scenario, under extreme local conditions (maximal dentist density, maximal mercury use, absence of separator devices), a risk of secondary poisoning due to methylation cannot be excluded;*
- *regarding the risk for human health due to environmental mercury in soil and air originating from dental amalgam use, it can be concluded that this emission fraction of Hg represents a very minor contribution to total human exposure from soil and through inhalation;*
- *the information available on the Hg-free alternatives does not allow a sound risk assessment to be performed.*

The dental profession takes seriously the environmental impact of its activities and the CED emphasises that the dentist and dental practices have an obligation to work within the legal framework governing mercury-containing products. The CED calls on Member States to ensure the full implementation and enforcement of EU waste laws, and fully supports examination into whether this is happening.

Amalgam separators are significantly effective in reducing harmful dental amalgam waste and remove a further 95% from the dental units' existing filtration systems. This results in the capture of 99% of waste amalgam before it enters the waste streams.

The CED encourages national dental associations to share best practice information on waste management and to support their members regarding compliance with waste management obligations.

The CED has previously demonstrated due regard to the reduction of the health and environmental impacts of the profession's use of dental amalgam through its [Resolution on Environmental Management of Dental Materials: Responsible Practice 2013 update](#).

IV- ECONOMIC CONSIDERATIONS

Regardless of disease rates and level of state funding of oral health services in individual countries, the routine use of alternative materials elevates the cost of dental treatment.

The evolution of health systems to accommodate the changes in support of the Minamata Convention must be balanced by the need for domestic stability of healthcare provision. An abrupt change could deeply destabilise health economies and could contribute to creating an unintended consequence of increased untreated disease levels or the choice by the patient of extraction rather than restoration.

Financial and operational issues are key factors affecting the pace of change in individual European countries. This has duly been acknowledged by the Minamata Convention, which entered into force on 16 August 2017, in the heading of Annex A part II. There it is stated that domestic circumstances have to be taken into account when considering measures to phase down the use of dental amalgam.

V - USE OF DENTAL AMALGAM

As one of the tools of dentists' armoury, dental amalgam continues to be an appropriate filling material for many restorations, due to its ease of use, durability, and cost-effectiveness. Dentists are best placed to identify patients' oral health needs, offer choices of a range of options to their patients and seek valid consent for the treatment they provide.

CED acknowledges that the different health systems worldwide require individual solutions, and amalgam still represents an important option.

Subject to individual countries' interpretation of the Minamata Treaty, patients must be provided with information with which to give valid consent to treatment and must not be denied freedom of choice in respect of how to be treated.

The phase down of the use of dental amalgam must be viewed in relation to the availability of substitute materials that are safe in respect of both health and environmental considerations. To maintain and protect public health, the phase down of amalgam needs to be accompanied by the development of a similarly effective and universally applicable substitute material and continued research into the short and long term impact of current range of alternative restorative materials.

The, as yet, incomplete evaluation of the environmental and health impacts of materials that incorporate plastics and nanoparticles means that there is much work to be done before any unintended consequences are fully appreciated.

VI - MINAMATA CONVENTION

The CED believes that the ratification of the Minamata Convention on Mercury, a globally-binding treaty on the use of mercury is a sensible outcome that recognises the practicalities

of improving oral health. For many years, the CED has stressed the importance of avoiding a complete phase-out of the use of mercury in dentistry, particularly in a short timeframe.

The CED welcomes the flexible approach adopted to take into account countries' domestic circumstances. The treaty encourages governments to phase down dental amalgam alongside investment in prevention, appropriately funded healthcare systems, promoting innovation, education, research and accurate information on the efficacy of all dental materials. It achieves a good balance between the use of dental amalgam and non-mercury based materials.

In this respect, the European Union has also adopted the Regulation 2017/852 ("Mercury Regulation"), by which dental amalgam shall not be used for dental treatment of deciduous teeth, of children under 15 years and of pregnant or breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient. In addition, it provides a prohibition of the use of bulk mercury by 2019. All these measures will lead to a decrease in the use of amalgam.

Although data is not readily available in all Member States, in Germany for example, it has been demonstrated in 2018 that there was an 80% decline in caries and 50% decline in the use of fillings, the share of dental amalgam restorations having reduced to around 5-7%. CED understands that many other countries are experiencing similar decreasing trends in the use of dental amalgam as a result of patient choice, improving properties of and clinician familiarity with the use of alternative materials and implementation of the Mercury Regulations.

VII - IMPLEMENTATION OF THE MERCURY REGULATION

The dental profession appreciates the acknowledgment in the Mercury Regulation that there are occasions when, with appropriate and valid consent, exceptions to the restrictions on the use of dental amalgam may apply. This would normally include situations where there is an allergy or local adverse reaction to a component of glass ionomer or resin composite material or when moisture control or patient cooperation is insufficient to allow the use of an alternative material even as a medium term restoration.

Adopted by the CED GM on 22 of November 2019