Dental Amalgam - Its Clinical Use and Disposal

**Summary** The guideline provides recommendations on the use of dental amalgam in treating patients within public oral health clinics; and the safe disposal of waste dental amalgam.

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**Functional group** Clinical/Patient Services - Dental/Oral, Medical Treatment
Population Health - Waste Management, Environmental

**Applies to** Local Health Networks, Board Governed Statutory Health Corporations, Affiliated Health Organisations, Dental Schools and Clinics, Public Health Units, Public Hospitals

**Distributed to** Public Health System, NSW Ambulance Service, Ministry of Health, Tertiary Education Institutes

**Audience** Dental practitioners
DENTAL AMALGAM – ITS CLINICAL USE AND DISPOSAL

PURPOSE
The guideline provides recommendations on the use of dental amalgam in treating patients within public oral health clinics; and the safe disposal of waste dental amalgam.

KEY PRINCIPLES
Dental amalgam is a safe, useful and long lasting dental restorative material. It is particularly useful for restoring larger cavities in permanent posterior teeth. However, clinicians should provide their patients with appropriate information on the risks and benefits of all dental materials.

USE OF THE GUIDELINE
The guideline is to provide a recommended protocol on the clinical use of amalgam and its disposal to public oral health services staff.

This guideline is to be read in conjunction with:
- National Health and Medical Research Council Report’s (1981) ‘Recommendations in Dental Mercury Hygiene’

REVISION HISTORY

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<tr>
<th>Version</th>
<th>Approved by</th>
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<tr>
<td>February 2011</td>
<td>Deputy Director-General</td>
<td>Rescinds IB 99/24. Updates information on the use clinical use of Amalgam and its disposal and changes the document type to a guideline.</td>
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<td>December 1999</td>
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<td>Information bulletin on clinical use of amalgam and its disposal</td>
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<td>(IB 99/24)</td>
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ATTACHED DOCUMENTS
1. Dental Amalgam Clinical Use and Waste Management Protocols
1. CLINICAL USE OF AMALGAM

1.1 It is prudent to avoid the placement or removal of dental amalgam restorations during pregnancy, especially during the first trimester when the mother is breastfeeding, and its use in those patients with kidney disease.

1.2 Amalgam is a material suitable for larger restorations of posterior permanent teeth in children, young adults and adults.

1.3 Directly-placed tooth coloured restorative materials in permanent posterior teeth should be restricted to one surface restorations and small and medium sized two- and three-surface restorations when adequate isolation can be achieved.

1.4 No conclusive, scientific validated evidence currently exists to justify the removal of dental amalgam restorations to relieve certain systemic symptoms, or treat particular medical conditions (other than proven allergy).

1.5 Only pre-capsulated amalgam is to be used.

2. WASTE MANAGEMENT OF DENTAL AMALGAM

2.1 The National Health and Medical Research Council’s ‘Recommendations in Dental Mercury Hygiene’ should be followed to reduce occupational and patient exposure to mercury in dental practices from amalgam waste.

2.2 All public dental clinics in NSW shall be equipped with specialist systems to trap waste amalgam to control the distribution into the general environment.

2.3 All reasonable measures should be taken to minimize the discharge of mercury into the environment

2.4 Amalgam and amalgam-filled extracted teeth must not be incinerated and should be recycled wherever possible

2.5 Waste amalgam should be stored in an air tight plastic container labeled “Amalgam for Recycling”\(^1\)

2.6 It is recommended that mercury waste be returned to metal or precious metal recyclers for reclamation. If necessary the Environment Protection Authority should be contacted for specific requirements for disposal of mercury.

3. Associated Documents


4. Acknowledgement

The Dental Amalgam – its clinical use and disposal guideline was prepared by the Centre for Oral Health Strategy NSW and State Oral Health Executive. The Centre would like to thank the expert working group members who participated in the development of this document; Professor A Blinkhorn (NSW Health Chair, Population Oral Health, Faculty of Dentistry, USyd), Professor M Swain (Senior Lecturer and Researcher, Faculty of Dentistry, USyd) Professor R Bryant (Senior Lecturer and Researcher, Faculty of Dentistry, USyd and Charles Sturt University), Dr L Chor (Clinical Oral Health Director, HNEAHS) Dr M Arora (Senior Lecturer, Faculty of Dentistry, USyd), Dr G Craig (President NSW Australian Dental Association), and Mr K Lachireddy (Senior Policy Analyst, Environmental Health Branch, NSW DoH).

5. References


Reviews undertaken by following leading professional agencies such as Australian Dental Association (2007), American Dental Association (2009), World Dental Federation (2002), Centres for Disease Control and Prevention (2005)