## **EU DENTAL LIAISON COMMITTEE**

President: **Dr Wolfgang Doneus** 



## Mercury in dental amalgam – DLC feedback to questions on its continued use

Brussels, 27 September 2005

## Background:

- In January 2005 the European Commission published a strategy concerning mercury in which it stated it would review the use of mercury in dental amalgam. The Commission called on the EU Council and European Parliament for a response.
- In June the Council approved the strategy and emphasised the need to look at mercury.
- In Parliament, the Cypriot Liberal MEP Marios Matsakis is preparing a report in which he will call for an eventual ban on dental amalgam.

Based on this, the DLC Brussels office asked DLC members the following questions:

- Is it desirable/necessary, for health or environmental reasons, to ban the use of mercury in dental amalgam?
- Are there suitable alternatives to amalgam at the moment? Will there be suitable alternatives in 5-10 years (in terms of quality and longevity of filling, safety of alternative materials, cost etc.)?

This is a synthesis of the responses.

COUNTRY	DESIRABLE/NECESSARY TO BAN MERCURY?	SUITABLE ALTERNATIVES NOW/ WITHIN 5-10 YEARS?	COMMENTS
Belgium	No – no need for a ban		
Croatia	No	Depends on developments of technology	
Czech Republic	No	No comparable alternative for posterior teeth. Not clear if there will be in 5-10 years.	
Estonia	No – neither government nor profession see need to ban mercury	Alternatives (ceramics) available but 5 times more expensive (amalgam crown: €26, ceramic: €128)	Disadvantages of mercury: aesthetic, sometimes allergic reactions, temperature conductivity.  Advantages: low price, strong
Finland	No – dentist should be free to choose best material for individual patient. Health problems from amalgam are very rare.	For large restorations in molar teeth, best choice is still amalgam.	Recent study showed plastic fillings lasted on average 7.8 yrs; amalgam lasted 12.6 yrs
France	No – no known scientific reason to ban mercury based on concern for patient's health. Only issue is safety of dentist – this is solved by guidelines on use of mercury.	There are alternatives, but much more expensive, poor durability and unproven biological and clinical quality.	
Germany	No – leading German scientific dental organisation says no evidence to support ban on amalgam fillings. There are strict rules on mercury waste – amalgam separators must be used.	At present no alternative which fulfils all requirements. In 5-10 yrs, difficult to say.	Amalgam fillings are not used for children and pregnant women in Germany.
Greece	No – use of mercury has reduced a lot already, mainly for aesthetic reasons	Composite resins, indirect ceramic restorations are alternatives, but cost, time-consuming process + special clinical cases are considerable disadvantages.	
Hungary	No – no scientifically proven hazard except metal allergy.	For public health services there is no alternative: cost, working time and durability of current alternatives are too disadvantageous	

Ireland	No – Government and profession agree there is no justification for a ban. Only disadvantage is allergic reactions – but very rare.	Unlikely that better alternatives will be available in 5-10 yrs	Durability is very important, because frequent replacements weaken the tooth structure and can cause further problems
Italy	No – no scientific evidence that proves health damage through amalgam fillings.	Because of excellent properties of amalgam  – ease of use, low cost, durability – good alternatives within 5-10 yrs are unlikely.	
Malta	No.	No suitable alternative at the moment, nor in the near future.	
Netherlands	No. No scientific evidence proving health risks of amalgam.	Alternatives may be aesthetically better but durability, cost and possible allergenicity of alternatives makes them less attractive.	
Norway	Government is considering a mercury ban for environmental reasons. The plan is to cease the release of mercury by 2020.		The profession is following the Government's advice
Portugal	No evidence to support a ban. Use of amalgam will reduce gradually and naturally even without a ban (mainly aesthetic reasons). Environmental issues are important + waste must be reduce – amalgam separators.	At present no true substitute for amalgam – in terms of cost, difficulty of use – but should be within 10 yrs	
Romania	No – existing guidelines should be followed and amalgam separator used.	No alternatives at the moment. Future generations of composites should be suitable.	
Slovakia	No. There are strict regulations on amalgam waste in Slovakia.	At present, alternatives are more expensive, or less durable or insufficiently tested. Should be suitable alternatives in 5-10 yrs	
Slovenia	No.	At the moment there is no alternative to amalgam.	

Spain	No – use of amalgam is safe and effective.	At present no better alternative – amalgam is more durable, usage is easier. Very little research into safety of composite resins.	
Sweden	No ban in Sweden at present, but one has been proposed by Chemicals Inspectorate. Profession supports the proposal (with some exceptions) for environmental reasons.	There are suitable alternatives to amalgam.	
Switzerland	There is no ban in Switzerland, but 80% of fillings are done with non-amalgam material – simply market pressure.		Amalgam fillings are not used for young children and pregnant women.
UK	No – there is no justification for a ban.	There is no better alternative – amalgam fillings are durable and expand and contract at same rate as natural tooth.	Currently, dentists should avoid administering amalgam fillings to pregnant women "where clinically reasonable".