

Dental Amalgam: Dispelling the Mercury Rumors

Do **amalgam fillings** contain mercury? Yes.

Does mercury escape from amalgam fillings? Yes.

Have the levels of mercury released by amalgam fillings been shown through controlled scientific study to be dangerous? No.

Clearly, we need to be sensible about the information we provide to the public. Anecdotal information and simple facts quoted out of context without qualification and without correct interpretation can be misleading and alarming.

- Mercury is a component of the amalgam used in silver-colored fillings. The other major ingredients are silver, tin, copper and zinc. When mixed, these elements bond to form a strong, stable substance. The average content of mercury in an amalgam restoration is slightly less than 50 percent.

- For more than 150 years, billions of amalgam restorations have been placed and a National Institutes of Health report states that only 50 documented cases of allergy to mercury have been reported in scientific literature since 1906. One hundred million people in the United States have amalgam fillings, and 100 million amalgam fillings are placed each year.

- Studies show that no filling material has been proven superior to amalgam in safety, durability and cost effectiveness. Amalgam has been researched worldwide and no study has ever caused a professional dental organization or agency to recommend a ban of amalgam.

- The amount of mercury ingested by someone with amalgam restorations is miniscule -- well below established health safety standards. Mercury also enters the body through the ingestion of food (e.g., fish), water and through breathing air. Eventually, the body rids itself of mercury, but there is always a very low level of mercury present in the body.

- In 1995, following a meeting of government health officials from nine European nations, the United States and Canada, the U.S. Public Health Service released a statement reiterating that there are "no scientifically compelling reasons either to discontinue or to curtail the clinical use of dental amalgam or to recommend removal of existing amalgam fillings," without clear evidence of allergy or intolerance in individual patients.

- A 1999 article in the *Journal of the American Dental Association* reported that researchers found "no significant association of Alzheimer's Disease with the number, surface area or history of having dental amalgam restorations." Other claims that the removal of amalgam fillings leads to recovery from multiple sclerosis, or that the use of amalgam leads to arthritis are unsubstantiated and without scientifically established cause and effect.

- The CDA does not believe that a dentist should prey upon the fears of people who have serious medical conditions by selling them dental treatment that may cost thousands of dollars, and for which no cure has been proven.

- In 1997, the World Health Organization stated that no controlled studies have been published demonstrating systemic adverse effects from amalgam restorations.

- The long-term cost of two or three surface gold or composite restorations in permanent teeth is about four times greater than for amalgam restorations.

- There is no sound scientific evidence to support any health benefits from the removal of amalgam. The ADA Council on Ethics, Bylaws and Judicial Affairs has stated that "Based on available scientific data, the ADA has determined that the removal of amalgam restorations from the non-allergic patient for the alleged purpose of removing toxic substances from the body, when such treatment is performed solely at the recommendation or suggestion of the dentist, is improper and unethical." Replacing dental amalgam for aesthetic purposes has its own risks and the dentist should discuss all of the risk and benefits with the patient before replacing serviceable amalgam restorations.

- The Dental Board of California has a "Dental Materials Fact Sheet" that describes the



