

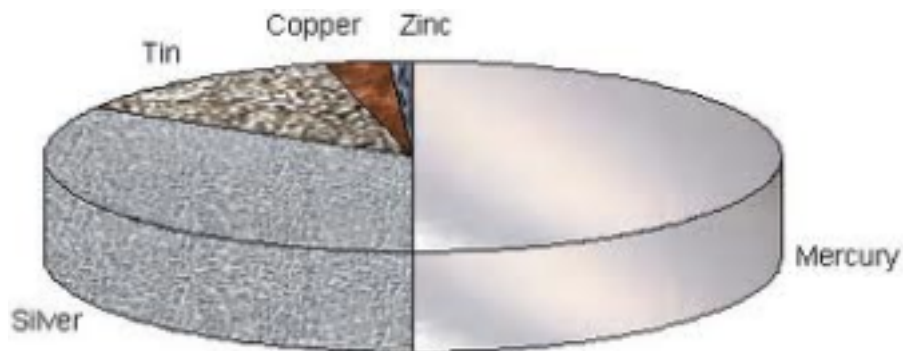


To quote the famous William Shakespeare – had he been a restorative dentist – “To leave my amalgam fillings or not to leave my amalgam fillings, that is the question.”



One of the most vexing issues in dentistry today revolves around the use of silver fillings (amalgams) in our mouths. Do we need to take out the old mercury-laden silver fillings for fear of health issues and replace them, or are there better restorative dentistry options that do not pose any potential risk to our health? Dental professionals in the United States and around the world are currently debating this hot issue.

Amazingly, 72% of those surveyed in the US did not know that silver fillings contain mercury and when they do find out, 92% of the respondents would have wanted to know about the possible mercury issues when the silver fillings were first placed.



Mercury is a powerful neurotoxin and, at certain levels, can cause neurological issues, autoimmune disease, chronic illnesses and mental disorders. The burning question is whether an unknown quantity of mercury vapor in our silver fillings at a constant exposure poses a significant health risk.

Amalgams consist of 50% mercury along with a combination of silver, tin, and copper. Studies have found that the amount of mercury vapor from amalgams varies from 1- 3 ug/day (micrograms/day), at the low estimation, up to 27 ug/day. This translates to 3% to 68% of workplace air quality standards that are allowable by the *Occupational Safety and Health Administration* (OSHA, our federal environmental agency). What this means is that at the high level – and with continuous exposure – we could be at levels that OSHA says are unhealthy. The World Health Organization (WHO) has stated that the exposure to mercury vapor can greatly increase beyond this number due to personal habits such as grinding of the teeth, chewing gum, and drinking carbonated drinks. This could lead to a fivefold increase in mercury levels after these activities.

In addition to the problems with mercury vapor coming off of silver fillings in our mouth, there is the issue of water contamination from removing the silver fillings and the ensuing environmental impact as the mercury finds its way into the water supply.

The WHO (World Health Organization) reports that mercury from amalgam and laboratory devices accounts for 53% of total mercury emissions into our environment. The EPA recommends that dentists use amalgam separators to catch and hold excess amalgam waste, to decrease the release of mercury into the sewer system. At this time, these are not mandatory in the US. Let's all be aware of the environmental issues surrounding amalgam removal and nudge our elected officials to get current on this problem and come up with solutions.

The US is not alone in this conundrum. In 2008, Scandinavian countries took action and banned the use of amalgam fillings for environmental and health reasons.

There are conflicting studies between Sweden and the United States. In Sweden, they have conducted a number of studies where people, with pre-existing neurological and health issues (Chronic Fatigue-type symptoms), had amalgams removed; 78% reported improvement in their health status. In the United States, official studies hired by the FDA and National Institutes of Health (NIH) stated that "the current data is insufficient to support an association between mercury release from amalgams and the various complaints that have been attributed to this restorative material."

In 2001, the US National Health and Nutrition Examination surveyed 31,000 adults and found that the number of dental fillings correlated to the incidence of cancer, mental conditions, thyroid conditions, neurological issues (including MS), diseases of the respiratory system, and diseases of

the eye. However, the United States, FDA and various Supreme Court justices determined that “the correlations do not sufficiently demonstrate causation.”

What this means is that statistical evidence showing mercury vapor emitting from amalgams does not have a direct causative effect on the various diseases that are being implicated, and correlation does NOT mean causation.

In 2003, the World Health Organization called for further studies to be done. In 2009, **the FDA issued a new regulation placing dental amalgams into Class II (moderate risk) from Class I (low risk), allowing them to impose special controls and recommendations surrounding the use of amalgams.**

The current ADA and FDA position is that amalgam is a safe restorative material, and any **dentist who recommends removing amalgams due to health concerns from mercury vapor is deemed unethical and could have their license taken away.** Silver fillings have been used for 150 years; today, around 47% of all dentists still place amalgam fillings.

We do know that mercury vapor is released from silver fillings. But whether amalgam poses a real health risk is still not known for sure. We know there are certain factors that play into more mercury leaching into the body: the number of fillings in the mouth, the age of the fillings, diet, the acid we put in the mouth through carbonated drinks and grinding of the teeth.

Dental amalgams were always considered inert, that little mercury release would occur. With new detection techniques, the measurement of mercury

release from amalgam fillings has become possible, down to micrograms per cubic meter. These new detection methods are allowing experts to question previous studies, and new concerns are surfacing from experts.

The highest amount of mercury exposure from silver fillings occurs when they are placed and when they are removed from our mouths. Don't run to the dentist to have your fillings taken out. But *do* have your dental team examine your fillings to determine whether or not they are intact, and have a conversation about the potential health risks of keeping or removing amalgams.

If they are 20 years and older, causing gum inflammation and preventing you from flossing, and/or have decay underneath, replace them with a non-amalgam restoration. There are terrific restorative options that we currently have in the dental profession other than silver fillings, including direct composite fillings, a cost-effective option, or the more expensive laboratory-fabricated porcelain and/or gold restoration that strengthen the teeth without the potential long-term health risks.



If you are having a silver filling removed, make sure the dentist is using a dental rubber dam that isolates the tooth and minimizes the amount of mercury vapor released.



We must be transparent in the United States about the potential health threat from amalgam fillings. The most critical action point is for more research to be conducted. We need stronger clinical studies funded by our government agencies and research centers to clearly understand the effect of continual release of mercury by amalgam fillings and the cumulative effect on all of us – adults, nursing mothers, newborn babies and children.

With this information, you are now armed with the facts. Discuss the options with Seven Mile Beach Dental Clinic to make a smart decision.