Why I Became a Mercury Free Dentist

By Dr. Bill Wolfe DDS



Bill Wolfe DDS

was 14 years old and a part time dental assistant for my father's best friend in Austin, Texas in 1961. As required, I would mix the "silver" fillings for the dentist by combining a 50/50 mixture of mercury and alloy powder (silver, zinc, tin, and copper) into the automatic mixer (violently shaking the alloy and mercury). Upon removing the mixture, I would use a cotton cloth to squeeze out the excess mercury, creating the final amalgam filling material to place into the teeth.

While the dentist would be placing the fillings into the teeth, I would routinely play with the shiny little balls of excess mercury. One day the dentist looked at me and said, "don't do that...it's a poison." I replied...'It's a poison? Then why are we putting it in the kids' mouths?' He answered, "That's different." Confused, I remember going home that evening and asking my father about the issue, to which my father replied, "Dr. Smith is a doctor, he should know!" Case closed; or so I thought, until I found myself in dental school years later. I remember my first semester at Baylor College of Dentistry in 1968. I opened my dental materials textbook, "The Science of Dental Materials", and read the

MERCURY FREE DENTISTRY SINCE 1979! Silver Fillings Are Approximately 50% Mercury



following about mercury in silver fillings: "An analysis of clinical restorations indicated a wide variation in mercury content, ranging from approximately 45%-70%." I raised my hand and asked the professor about the mercury concern. I remember that he replied that it was "an old wives tale".

So, I became a routine mercury dentist with my ADA membership card in my wallet. Then I experienced the next lesson in my journey to becoming mercury free. People don't change because they are comfortable, and I had to get very uncomfortable to change. I found out that I had a large tumor deep in my throat, and had it been the wrong kind of tumor, I wouldn't be here today. Fortunately, it was benign, but I wanted to know why it had been in my body and how to make certain it wouldn't return.

While at a Dr. Hal Huggins' body chemistry seminar in 1979, I held my hands up to a mercury vapor detector (a Jerome instrument used in industrial analyses by OSHA). To my astonishment, I had as much mercury vapor coming out of my hands as is the maximum allowed in an OSHA inspection of a manufacturing plant! There was enough mercury vapor to be subjected to a fine of \$10,000 for a mercury spill! It took me about 5 seconds to become a mercury free dentist. I didn't know what I was going to do, but I did know that I could no longer be around mercury in my office, nor place anymore mercury fillings in patients' mouths.

In 1980, I purchased a mercury vapor analyzer, (like the one with which I was tested) to test everything in my office. I wanted to make certain that we were totally free of mercury in the office (my carpets were subsequently removed). One day, I took a mercury vapor reading from a patient's filling. I was shocked: 50 ug/m3 of air out of one tooth. That was higher than the TLV (Threshold Limit Value—now called the PEL—Permissible Exposure Limit) for industrial safety. The ADA said at that time that no mercury came out of amalgams. However, here was evidence to dispute that claim. The industrial standard is based on a 40 hour work week...but this filling is in the mouth 24 hours a day!

I began a research project to measure the mercury vapor emission from fillings, categorizing the size of the filling and the estimated age of the filling. I tested hundreds of fillings. There was no correlation. An older 20 year old amalgam had just as much vapor release as a 5 year old amalgam, and a small amalgam was sometimes very surprising in the large amount of mercury vapor emission. I began writing letters to the FDA, OSHA, and the ADA. I received no response from the FDA. However, here are the written responses from OSHA and the ADA: Although there would be no difference between mercury vapor measured inside the mouth and outside the mouth, the exposure potential of intra-oral mercury would be much greater than that of extra-oral mercury vapor, as mercury is toxic through the routes of absorption and ingestion as well as by inhalation.

U.S. Department of Labor, Occupational Safety and Health Administration, letter dated Nov. 26, 1986

The amalgam does not form until the dentist mixes the alloy with mercury. Therefore, dental amalgam per se cannot be certified. We cannot certify a reaction product made by the dentist.

American Dental Association, letter dated May 22, 1986

Over the years now, there have been numerous studies performed to demonstrate the emission of mercury from amalgam fillings, with some summaries of such studies indicated below:

There were significant correlations between Hg vapor released into intra-oral air after chewing stimulation and the numbers and types of amalgam restorations. It is concluded that intraoral air is a reliable physiological indicator of Hg released from dental amalgam that may reflect a major source of chronic Hg exposure.

Journal of Dental Research, August, 1985

Dental amalgams constitute the major human exposure to mercury.

World Health Organization, 1991

Considering that 80% of inhaled mercury is retained in the human body for some extended period of time it is obvious that dental amalgams would be one of the major contributors to human mercury body burden.

Dr. Boyd Haley / Professor of Chemistry and Biochemistry / University of Kentucky / May, 2007

There is no safe level of mercury exposure. World Health Scientific Panel, 1991

The American Dental Association now admits that mercury vapor is emitted from amalgam fillings, but concludes that it can't be proven that the mercury release causes any certain disease. Perhaps it can't be proven that its release causes any certain diseases...except of course... **MERCURY TOXICITY.**

Note: To discover how much mercury vapor is being emitted from your "silver fillings", call Dr. Wolfe's office: 505-988-9868. <u>www.drwolfe.com</u>

FACTS DO NOT CEASE TO EXIST BECAUSE THEY ARE IGNORED....