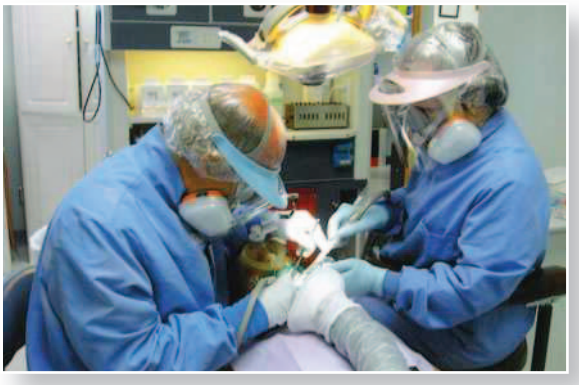
Mercury-Free Dentistry in a Mercury Safe Office

Obama Advocates Keeping Our Kids Mercury Safe by Bill Wolfe, DDS, NMD

President Obama stated recently in his speech at Ohio State University that "The strength of our country lies in keeping our children safe from toxic waste dumping and mercury exposure."

I certainly agree, as the major emphasis of my professional life for the past three decades has been to keep my patients, myself, and my staff safe from toxic mercury exposure.

Did you know that the seemingly routine act of unsafely removing mercury/silver/amalgam fillings places the patient, the dental staff, and the environment at risk of occupational exposure to toxic mercury vapor that far exceeds all of the government's regulatory agencies minimal industrial safety standards for mercury vapor? There is a significant difference between being "mercury-free" and "mercury-safe"! Today, 52% of general dentists no longer place mercury/amalgam fillings. However, more and more people are aware of the toxic effects of mercury, and they want to know if they are being protected at the dental office. It's no longer enough to just be mercury-free. After all, the greatest exposure to mercury vapor at the dental office occurs not when amalgam fillings are placed, but when they are unsafely removed!



My Safe Removal Guidelines for Amalgam Fillings

1. **IV vitamin C:** After bio-compatibility testing of the dental materials to be utilized in the replacement of the mercury/amalgam fillings, the patient is then administered an IV vitamin C (optional to patient) by one of our nurses. (I have used IV vitamin C in my protocols for 30 years now, since being introduced to the procedure by Dr. Hal Huggins in 1979.) Vitamin C is a "ligand" (heavy metal attractor) and is felt to be a protective measure to the patient during mercury/amalgam removal.

2. **Keeping the fillings cool during removal:** Drilling out an amalgam filling generates a tremendous amount of heat, which causes a significant increase in the release of mercury, both as a vapor and in amalgam particles, during the entire removal process. Cooling the filling with copious amounts of water while drilling substantially reduces the amount of mercury vapor released. Mercury is not water soluble, therefore, it is necessary to use large volumes of air/water to direct the mercury vapor and amalgam particles into the high volume suction, which is held closely to the operative site.

3. **Sectioning the amalgam into chunks for removal:** This procedure involves less drilling, and therefore less mercury vapor emission and particulate matter.

4. **Isolating the tooth and using high-volume air suction:** I use a high volume evacuation device called a "Clean-Up", which was developed in Scandinavia and is recommended by the IAOMT (International Association of Oral Medicine and Toxicology). I feel that proper isolation of the amalgam filled tooth is one of the most important tools in minimizing the patient's exposure to mercury vapor and amalgam particles. The design is a Teflon box which encloses the tooth and filling and has a suction tube attached to one of the walls of the box to suction mercury vapor and particulate matter. It dramatically reduces splatter of particles, directing them efficiently into the suction tube. Previously, it was believed that a "rubber dam" would sufficiently protect the patient from breathing mercury vapor and amalgam particles. We now know that mercury vapor can pass through a rubber dam made of latex, so even though the dam may serve as a particulate barrier, it does not protect the patient from inhaling mercury vapor during the removal process. In addition, it can be a bit uncomfortable for the patient, and some patients simply cannot tolerate its use.

5. **Homeopathic injections:** After removal of the mercury/amalgams and the usual underlying decay, I flush the interior of the tooth with homeopathics to desensitize the tooth. Then I also inject the associated organ acupuncture meridians in the mouth with homeopathics to re-energize the energy flow of the acupuncture meridian energy channels.

6. **Alternative air source:** Provide the patient with an alternative source of air. During the actual removal, the patient should be provided with a nasal hood, or oxygen and nitrous oxide. The patient is instructed to breathe through their nose and to avoid breathing through their mouth, while the mercury amalgam silver fillings are being removed.

7. **Air evacuation in work area:** In my offices, we use an additional air filtering system, called a "DentAir-Vac" that is placed as close to the patient's mouth as is practical. The more popular filtering units resemble an elephant's trunk and have openings about 4 inches in diameter. This evacuation of the work area is not only important for the residual exposure to patient, but especially for the reduced exposure to the dentist and assistant. Without such a vacuum unit in place, I have personally measured (with my Jerome mercury vapor analyzer) readings in the work area much higher than the PEL (permissible exposure limit) for OSHA and the REL (recommended exposure limit) values for NIOSH. As OSHA states, "A worker's exposure level to mercury vapor shall at no time exceed this ceiling level".

   Note: ***In my previous articles, I have also stated how I routinely measure mercury vapor readings much higher than the above OSHA exposure limit values in the patient's mouth...from just one mercury/amalgam filling!***

8. **Clean up immediately:** After the fillings have been removed and replaced, the dentist and assistant should immediately remove and dispose of the patient's protective covering and thoroughly clean their face and neck.

9. **Activated charcoal:** Once the filling(s) have been removed and replaced, the dentist and the assistant should remove and dispose of their gloves and the Clean-Up suction, then thoroughly rinse and vacuum the patient's entire mouth for at least 15 seconds. I use an energized form of powdered charcoal, after the mercury/amalgam fillings have been removed. The patient sits up in the chair and is given a diluted amount of the charcoal to swish in their mouth for 15 seconds and then spit out. This will help to bind amalgam particles and residual mercury vapor from the mouth. The patient should make every effort not to swallow during the rinsing procedure. I also suggest that after the rinsing procedure, the patient use a small amount of water and gargle as far back into his throat as possible. The patient should not swallow this watery residue! Instead, they should spit it into a second cup provided to them.

10. **Additional air purification:** I use air filters in all of my operatories. It is important that the air circulating in the operatory is as clean as possible at all times.

11. **Negative Ion Generators:** When removing amalgam fillings, the vapor from the fillings releases into the air. The negative ion generators help to capture the mercury in a filter thus reducing exposure to patient, dentist, and assistant.

12. **Environmental concerns:** Whether an office places mercury fillings or not, both mercury-free and pro-mercury offices have to remove these same mercury/amalgam fillings and potentially contribute this major heavy metal toxin into the wastewater. Our office has a double tier defense to the addition of mercury to the waste water. We use a particulate filtering system in the operatory units, along with a mercury filter in the main drain line from the office. Dentistry has been a major contributor to mercury in the wastewater, and I am proud to say for many years now that my office is conscious of this fact and has been striving to be environmentally responsible.

There is no minimum amount of mercury exposure which can be considered safe.

The World Health Organization