A Brief History of Amalgams

Timeline 1819 – 1995

1819: A Mercury-based dental amalgam filling was invented by the English chemist, Bell. 1826: The dental amalgam mercury filling was first used in England and France.

1830: Amalgam fillings were used in the United States. Numerous harmful effects were soon widely reported. 1840: The American Society of Dental Surgeons denounced the use of amalgams due to concerns about mercury poisoning. Members of the society were required to pledge to avoid the mercury amalgam fillings. But many dentists continued using amalgams, since they were cheaper, faster and easier to place than gold materials.

1859: The pro-mercury amalgam faction in America formed its own dental society, first called the National Dental Association; it was later re-named the American Dental Association (ADA).

1926: A prominent German chemist, Alfred Stock, discovered that mercury was the source of his own health problems. After having his own amalgams removed, Stock then studied the health problems of many of his friends and advised them to have their amalgams removed. He studied the release of mercury vapor from the amalgams and published his findings in over thirty scientific papers. Stock led an international movement to halt the use of mercury amalgam filling.

1930s: Stock’s laboratory and most of his records were destroyed in a World War II bombing raid, halting the antiamalgam movement had spearheaded.

1957: Dr. Karl O. Frykholm of Sweden published a study incorrectly claiming that when saliva covers an amalgam filling, the mercury is no longer released. Since then, the ADA began to cite Frykholm’s paper as proof that amalgam fillings are stable and safe.

1973: An American dentist suffering from MS, Hal Huggins, DDS, MS, met a Brazilian dentist, Olympia Pinto, at a conference in Mexico City. Pinto shocked Higgins by telling him that amalgam fillings are unstable and mercury from amalgams can trigger illness like Hodgkin’s disease and sickle cell anemia. Eventually Dr. Pinto sent Dr. Huggins many studies on amalgam research. Huggins, avidly learned about the amalgam health issue and became a noted speaker and writer on the hazards of amalgams.

1979: Measurable Mercury coming from amalgam. Gay and others at the University of Iowa reported a measurable release of mercury vapor from amalgam fillings; when the amalgams were stimulated by chewing, brushing or hot beverages the release was far greater. In 1981 Svare, at Ohio State, confirmed Gay’s findings.

1987: In Sweden, Nylander, Friberg and Lind published a study of mercury levels in the brains of people who died of sudden, unexpected death. Mercury levels in the occipital lobe brain cortex correlated significantly with the number of amalgam fillings in the person’s mouth.

1987: Nylander of Sweden and Eggleston of California, did a similar autopsy study on victims of sudden, unexpected death, confirming a strong correlation between brain levels of mercury and the number of amalgam filling surfaces in teeth.

1989: Dentists Poisoned. Nylander and Friberg publish an autopsy study showing that mercury levels were much higher in the pituitary glands (in the head) and the thyroid glands of dental staff as compared to a non-dentist control group. The mercury levels in the pituitary glands of the dental group was about forty times higher than that of a controls. Other studies proved dentists to have a higher rate of irritability, depression and mood disorders. Dentists have a six-fold higher rate of suicide than other white collar professionals.

1990: Lorscheider and Vimy at the University of Calgary School of Medicine placed amalgam fillings with radioactive mercury into pregnant sheep and monkeys. After just 29 days after the placement of the mercury amalgams, the mercury was traced and found in the kidneys, the liver, the gastrointestinal tract, the brain, and many other parts of the body including the unborn fetus. For both the mother and the fetus, the highest mercury level was in the pituitary gland, suggesting an amalgam mercury role in depression and mood disorders.
1983: University of Calgary research dentist Murray Vimy, joined with Michael Ziff, and American dentist and author, to found the International Academy of Oral Medicine and Toxicology (IAOMT) to educate dentists and other professionals about evidence based dentistry. With his father, Sam Ziff, Michael Ziff went on to author books on mercury free dentistry, dental mercury detox, and other related issues.

1988: DAMS groups began forming in Albuquerque, Denver, Chicago and elsewhere to educate the public. DECEMBER 16, 1990: The CBS television show Sixty Minutes, hosted by Morley Safer, and viewed by 30 million Americans, did an expose on the hazards of mercury amalgams; the host interviewed scientists Lars Friberg, Fritz Lorscheider, Murray Vimy and Boyd Haley. The program even exposed the biased attacks by state dental licensing boards on mercury free, holistic dentists. The ADA spokesmen squirmed under the pointed questions of the host.

1990: It's All in Your Head, by Hal Huggins began making further headway in expanding public awareness of the amalgam mercury problem.

1993: Anne Sommers, Ph.D., a microbiologist, reported that the placement of mercury amalgam fillings in monkeys and in humans causes a major shift in kinds of bacteria found in intestines. Through natural selection, some bacteria survive the mercury poison and are mercury resistant. Interestingly, the mercury resistant were found to have become antibiotic resistant; Sommers concluded that amalgams tend to produce more anti-biotic resistant bacteria.

1993, DECEMBER: The largest German manufacturer of amalgam, Degussa AG, stopped making amalgam.

1994: Sweden announced phase out of amalgam fillings, starting with pregnant women and children. 1994: Lorscheider, Vimy, Pendergrass and Haley reported that elemental mercury vapor from amalgam fillings is toxic to brain neurons. Low-dose mercury causes the neurofibrillary tangles in the brain – regarded as a key marker of Alzheimer's disease.

1994: A human autopsy study on babies who had died of Sudden Infant Death Syndrome (SIDS) was published by Drasch and others at the University of Munich in Germany. Drasch found a strong correlation between the mercury levels in the brains and kidneys of the babies and the number of amalgam fillings in the mother’s teeth. These findings were confirmed by another autopsy study conducted in the 1996 by Lutz. These studies showed that mercury from a mother’s mercury amalgam fillings is typically the major source of mercury for her unborn child. The German government then acted to curb the use of amalgams in children and women of child bearing age.

1995: G. Mark Richardson, Ph.D., released a report for Health Canada, Canada’s chief health regulatory body, on mercury exposure from dental amalgam fillings. He found that amalgams contribute about 50% or more of an adult’s mercury exposure and present an unacceptable hazard. Richardson advised Health Canada to ban dental amalgams; Health Canada did not go that far but in 1996 it established guidelines for dentists discouraging the use of amalgams in children, pregnant women, people with kidney disorders and other vulnerable people.