

## Amalgam Dangers

### History of Scientific Studies

<https://www.amalgam.org/science-and-history.html>

How did this happen?

A historical perspective on how the use of toxins became so pervasive worldwide.

### Mercury exposure from amalgams

The mercury fillings were quicker and easier to use than previous materials, so their use fueled the growth of their popularity. The ADA became the leading promoter and defender of mercury use in dentistry and for over a century promoted the myth that the mercury in the amalgam was stable or, sometimes, it was said that it was “a different kind of mercury,” a kind that was safe in the mouth.

In the early 1930s, Alfred Stock, a German chemist led a surge of scientific investigation into the hazards of mercury amalgam fillings, and he found that his own forgetfulness and brain fog was due to his being mercury poisoned. Alfred Stock led a surge of scientific study on dental mercury and called for it to be banned. But the allied bomber pilots of World War II bombed his chemistry lab into ruins and that ended his efforts to lead the effort to ban mercury fillings. (Thank you Allies!)

In the 1960s, a Brazilian dentist, Olympia Pinto, came to the United States and attempted to research the safety of dental amalgam fillings. He was thwarted in his attempts to research the subject, but some years later he met an American dentist, Hal Huggins, and shared his skepticism about the safety of mercury amalgams. It was the 1980s and Hal Huggins began his own research studies back in the US, and found that mercury amalgams were poisoning patients who had them and that their blood chemistry improved dramatically following safe amalgam removal and detoxification. A movement to investigate the concern over amalgam's safety was launched in America and led to a new world wide movement to ban them. For the scientific world, a spark of interest came when, in 1988, researchers at the University of Iowa, using improved mercury vapor measurement methods, published findings that a significant amount of mercury is being released from amalgam fillings at all times. There followed a torrent of research into the release of mercury from amalgam fillings; there were some very convincing animal studies as well as studies involving humans.

Science and history on mercury coming from amalgam fillings. Amalgams were found to be the greatest personal source of mercury, greater than all sources from food, water and air combined. Murray Vimy, DMD, and Fritz Lorscheimer, PhD, both at the University of Calgary School of Medicine, did studies involving the placement of amalgam fillings with radioactive mercury, first on pregnant sheep and then on a pregnant monkey. The radioactive mercury was found to have spread fetal and maternal blood within two days. The highest amalgam mercury concentrations were found in the liver and the pituitary gland of the fetus. In the pregnant sheep's body, many other parts of the body within 30 days of placement, and particularly targeted the kidneys, but also the heart, the thyroid, the GI tract, and obviously the mercury had crossed the placental barrier and got into the unborn fetus. This was followed by an explosion of research in Europe as well as the US and Canada.

In 1994, a German study on newborn babies that had died suddenly, as from SIDS, found a strong correlation between the mercury in some of the fetal tissues and the amount of dental amalgam fillings in the mother's mouth. Many European studies launched mercury amalgam studies on

animals and humans and harmful effects on brains and behavior due to prenatal exposure to mercury vapor. Researchers found that dentists had highly elevated levels of mercury in the pituitary glands compared to a non-dentist control group; the dentist group had mercury levels in the pituitary gland that were forty times higher. Anne Sommers, PhD, at the University of Georgia, impacted the mix of bacteria in the intestines, by giving rise to mercury resistant bacteria that had also become anti-biotic resistant.

In 1994, in the US, a biochemist, Boyd Haley, and his team found that low dose mercury causes the neurofibrillary tangles that are one of the markers of Alzheimer's disease. Their published paper explained the biochemistry of exactly how the low dose mercury causes the neurofibrillary tangles. The implication was that, if dental mercury were not the sole cause of Alzheimer's, it would certainly make it worse. In 1995, Mark Richardson, PhD, did a risk specialist of amalgam's safety for Health Canada, which is Canada's counterpart to the FDA. Richardson reported to Health Canada that mercury amalgams provide about 50% or more of a typical adult's mercury exposure and present "an unacceptable hazard: to a patient's health. The agency announced some guidelines cautioning against the use of amalgams in children, pregnant women and people with kidney disorders. But Health Canada did not ban amalgams as many had hoped.

Independent scientists continued to research the hazards of dental mercury fillings and began to call for the banning of the amalgam fillings.