



The Transition to Mercury-Free Dentistry in Africa

I. Amalgam (50% mercury) is an environmental disaster, a health risk, and a workplace danger.

Amalgam's main ingredient is mercury: a neurotoxin (brains), reproductive toxin (babies), and nephrotoxin (kidneys). Mercury is so toxic it is the sole subject of an international convention whose goal is to end man-made uses of mercury: the Minamata Convention.

Mercury is the most vaporous of the heavy metals, so a dental clinic still placing amalgam is a very dangerous work environment, especially for young women.

In the teeth, amalgam releases mercury vapor into the body, including (a) the brain, (b) kidneys, (c) the mother's breast milk, and (d) the female uterus. Because their brains are developing, at gravest risk of permanent injury for mercury are children – meaning we must also protect nursing mothers and pregnant women.

Mercury in fish and vegetables: Amalgam's mercury converts to methylmercury in the fish. Continued use of amalgam in Africa means that **children with a fish diet are at serious risk of brain damage**. Dental mercury gets into the ground and from there into vegetables people eat.

Dentistry is one of the largest uses of mercury in the world. The number of dentists in Africa is growing rapidly; it is essential that both new and old are trained in mercury-free dentistry, or the mercury pollution will get much worse.

In Africa, dental mercury is often diverted via the black market for use in small-scale gold mining. By ending mercury use in dentistry, we will reduce access to mercury that is so ruinous to the health of those living in gold-mining communities.

A valuable resource for African NGO leaders is Dr Graeme Munro-Hall, the Chief Dental Officer of the World Alliance, <u>wafmfd-uk@steeps.net</u>