

To print this article open the file menu and choose Print.

[return to burlingtonfreepress.com](http://burlingtonfreepress.com)

My Turn: Reduce mercury

By Susan Premo

March 29, 2006

I read the recent My Turn of Daniel Ferraris and feel the public needs to be offered the facts. I applaud the position of the Advisory Committee on Mercury for trying to reduce all sources of mercury which is the second most toxic element on earth and a potent neurotoxin. Some statements by Ferraris are not accurate and need clarification.

1. If dentists truly want to reduce mercury load in the environment, they would stop placing amalgam fillings. Dentists are the third largest user of refined mercury in this country, using over 34 tons per year.

Over 80% of all household wastewater mercury comes from human wastes of those with amalgam fillings. "The Association of Metropolitan Sewerage Agencies (AMSA) reports that mercury levels in household wastewater are sufficiently high to pose Clean Water Act compliance problems for the nation's wastewater treatment plants. Although several sources contributing to the domestic mercury concentrations have been identified, human wastes (feces and urine) from individuals with dental amalgam fillings are believed to be the most significant source — greater than 80 percent." According to the US Naval Dental Research Institute, discharged mercury from dental amalgam can methylate and become bioavailable as methylmercury, contaminating ecosystems and moving up the food chain.

Another issue is mercury vapor from crematoriums. In Europe, the removal of amalgam fillings before cremation is becoming required. A better solution would be not to place them.

2. This brings us to his second assertion that mercury in amalgam becomes inert in its amalgam state. This would embarrass my high school chemistry teacher. It is simply not true. In fact, in 2005 a federal appeals court ruled that the dental amalgam manufacturer clearly warns that amalgam is highly toxic with the possibility of neurological and reproductive damage in its amalgam state. (*Barnes v. Kerr*)

According to WHO: "Dental amalgam is the most commonly used dental filling material. It is a mixture of mercury and a metal alloy. The normal composition is 45-55% mercury; approximately 30% silver and other metals such as copper, tin and zinc. In 1991, the World Health Organization confirmed that mercury contained in dental amalgam is the greatest source of mercury vapour in non-industrialized settings, exposing the concerned population to mercury levels significantly exceeding those set for food and for air." <http://www.who.int/ipcs/publications/cicad/en/cicad50.pdf>

The International Academy of Oral Medicine and Toxicology provides a comprehensive listing of peer-reviewed scientific studies showing that dental amalgam is not a stable substance and does indeed vaporize into the human body. (How else would it get into the wastewater through human waste?) <http://www.iaomt.org/>

In 2001, the National Academy of Sciences reported that mercury vapor from dental amalgam is the primary source of elemental mercury exposure to humans.

The US Agency of Toxic Substances and Disease Registry reports that dental amalgams constantly vaporize and the vapors are inhaled into the body and distributed by the bloodstream to vital organs. The mercury

from amalgam can pass through the placenta of pregnant women and through the milk of lactating women, increasing health risks to infants.

US Representative Dan Burton (IN) chaired Congressional Health & Welfare Sub-committee hearings on mercury for four years. The findings resulted in a call for the removal of mercury from health/dental products. Representatives Burton, Watson (CA) and Michaud (ME) have again introduced a bill in 2005 (H4011) toward this goal.

3. Ferraris speaks of how long amalgam has been used but neglects to say when it was introduced, dentists fought the idea of placing mercury into the human body and asked all members to sign a pledge not to do so. This caused a division in the dental community that led to the present ADA which saw a financial future in amalgam for members.

4. Ferraris tells us that it is considered the best material in some instances yet Sweden concluded, after a five year study of dental amalgam, that it is no longer necessary in any circumstances in modern dentistry and they have banned its use. (See quote below) In fact, amalgam is generally not considered a good choice since it removes more live tissue than alternatives thus leaving the tooth more vulnerable to fracture and need for further dental work.

"For medical reasons, amalgam should be eliminated in dental care as soon as possible. This will confer gains in three respects. The prevalence of side-effects from patients' mercury exposure will decline; occupational exposure to mercury can cease in dental care; and one of our largest sources of mercury in the environment can be eliminated.

Dental materials left in patients' mouths should be treated as drugs for administrative purposes. Accordingly, toxicological and clinical testing should be required. Reporting of side-effects should also take place according to the same norms that apply to drugs.

It is imperative for doctors and dentists to be made aware of the fact that all dental restoration materials can give rise to side-effects, and that this eventuality should always be considered when the patient's pathological state is unclear. Side-effects may conceivably both cause, and be contributory factors in, various pathological states."

5. Ferraris states that medical/dental care should not be mandated. On this point, I agree with him in theory. But the premise only works, if the medical/dental community is forthright with the patient about content of materials, possible side affects, and alternatives. For some time, there have been efforts to get VT dentists to inform their patients that dental amalgam contains 50% mercury and that there are options. They have fought this idea despite their own code:

" As every dentist knows, it is a good risk management practice to discuss the risks and benefits of a proposed treatment plan with a patient before starting treatment. In many cases, the dentist has a corresponding legal obligation to obtain informed consent from a patient before beginning treatment " October 2003 JADA (Journal of the American Dental Association)

In February 2006, a Zogby poll indicated the following:

? 76% of Americans do not realize there is mercury in their dental fillings.

? 92% want to be informed of their options as to mercury/non-mercury fillings prior to treatment

? 77% would pay more to have a non-mercury filling if given the choice

? 69% of New Englanders would support a ban on mercury in fillings for pregnant women and children under 6.

If Mr. Ferraris is correct about Vermont dentists' commitment to patient care and the environment, then he should read and transmit the facts to the public and work voluntarily toward full notification of patients about mercury.

All facts/articles referenced in this letter may be accessed in full at <http://www.mercuryfreehealth.org/>. I strongly encourage every Vermonter to read the facts and research and educate themselves on this issue.

On a more human note, I have had the opportunity in the past year to interview a number of patients

diagnosed with mercury poisoning with severe symptoms, all of whom improved dramatically with the removal of their amalgam fillings.

Susan Premo lives in Worcester.