# **Mercury Pollution and Prenatal Exposure**

#### By Dr. Mercola

Every year, up to 2 million children in the European Union (EU) are born with methylmercury exposures that exceed the EU's safe limit. Of them, 200,000 have levels *above* the World Health Organization's (WHO) recommended *maximum* for mercury exposures, which means they're born with hazardous levels of mercury in their tiny bodies.

These alarming statistics came from a new study revealing the huge health burden and economic toll that mercury pollution is taking on populations worldwide.<sup>1</sup>

## Controlling Mercury Pollution Could Save 700,000 IQ Points a Year

Mercury is a potent neurotoxin; it doesn't take much to cause serious damage because there is absolutely no safe level of exposure. For instance, if you were to take the amount of mercury in a typical thermometer and put it in a small lake, that lake could be closed down due to environmental hazards.

Children and fetuses whose brains are still developing are at greatest risk because of their small size, their more permeable blood-brain barriers and the fact that they're detoxification systems are not yet capable of effectively removing toxic challenges. Exposure to mercury while the brain is still developing has been linked to lower IQ, and therefore a lower lifetime learning potential.

For instance, research has revealed that babies exposed to higher levels of mercury in the womb scored lower on skills tests when they became infants and toddlers.<sup>2</sup>

According to the new study, if the effects of mercury on developing brains were converted into IQ points, controlling mercury pollution would save 700,000 IQ points per year in the European Union alone, and lead to significant economic benefits as a result. Researchers noted:

"These estimates document that efforts to combat mercury pollution and to reduce MeHg exposures will have very substantial economic benefits in Europe ... "

# **Mercury Fillings Remain a Major Cause of Mercury Pollution**

You've probably heard about the risks of consuming seafood that's contaminated with mercury. Ever wonder where all that mercury in fish and seafood comes from? As <a href="Charlie Brown of Consumers for Dental Choice">Consumers for Dental Choice</a> put it:

"Mercury fillings are one source of mercury contaminating the fish and seafood that we eat. The environmental health effects of dental mercury are well known: brain damage and neurological problems, especially for children and the unborn babies of pregnant women."

The use of mercury fillings is very much an issue of global concern, as once in the environment, dental mercury converts to its even more toxic form, methylmercury, and becomes a major source of accumulated mercury in the fish you eat. Mercury from dental amalgam pollutes:

- Water via dental clinic releases and human waste (amalgam is by far the largest source of mercury in our wastewater)
- Air via cremation, dental clinic emissions, sludge incineration, and respiration; and
- **Soil** via landfills, burials, and fertilizer

#### Mercury Fillings May Pose Risks to Children, Pregnant Women

Even the U.S. Food and Drug Administration (FDA) admits that amalgam could be dangerous for children and that there is no evidence that it is safe for them. Buried deep in the FDA's 2009 amalgam rule, FDA conceded:<sup>3</sup>

"The developing neurological systems in fetuses and young children may be more sensitive to the neurotoxic effects of mercury vapor. Very limited to no clinical information is available regarding long-term health outcomes in pregnant women and their developing fetuses, and children under the age of six, including infants who are breastfed."

There is overwhelming evidence showing mercury from dental fillings to be easily released in the form of vapor each time you eat, drink, brush your teeth, chew gum, or otherwise stimulate your teeth. This mercury vapor readily passes through cell membranes, across your blood-brain barrier, and into your central nervous system, where it can cause psychological, neurological and immunological problems. In the United States, children and pregnant women continue to have their health and the health of future generations put at risk because the FDA is failing to protect them.

The WHO also reports the known toxic effects of mercury exposure, including in its inhaled vapor form, stating:<sup>4</sup>

"Mercury is highly toxic and harmful to health. Approximately 80% of inhaled mercury vapor is absorbed in the blood through the lungs, causing damages to lungs, kidneys and the nervous, digestive, respiratory and immune systems. Health effects from excessive mercury exposure include tremors, impaired vision and hearing, paralysis, insomnia, emotional instability, developmental deficits during fetal development, and attention deficit and developmental delays during childhood."

# If You're Pregnant, WAIT to Have Your Mercury Fillings Removed

For those of you who have mercury fillings, I recommend that you have them removed -- but this should NOT be done while you're pregnant or breastfeeding. This is because when you have these fillings removed you can be exposed to significant amounts of mercury vapors if the dentist doesn't know what he or she is doing, and this could be quite toxic to a fetus or breastfed infant.

It's also for this reason that I strongly suggest you get healthy BEFORE having your fillings removed, as you want your detoxification mechanisms optimized prior to removal. Once you are healthy and no longer pregnant or nursing, find a qualified biological dentist who is experienced with mercury filling removal. Some things that need to be done to keep you (and your dentist) safe during mercury filling (amalgam) removal include:

- Providing you with an alternative air source and instructing you not to breathe through your mouth
- Using a cold-water spray to minimize mercury vapors
- Putting a rubber dam in your mouth so you don't swallow or inhale any toxins
- Using a high-volume evacuator near the tooth at all times to evacuate the mercury vapor
- Washing your mouth out immediately after the fillings have been removed (the dentist should also change gloves after the removal)
- Immediately cleaning your protective wear and face once the fillings are removed
- Using room air purifiers

#### **How to Detoxify from Mercury Exposure**

In the video above, Dr. Christopher Shade, a mercury and glutathione expert from the University of Illinois, explains how your body's natural heavy metal detoxification system works. It's a lengthy lecture — about three hours. But if you truly want an in-depth understanding of this topic, he gives an excellent presentation of the latest science about the human biochemistry of mercury.

Your body is designed to detoxify mercury and other heavy metals, but an impaired metabolism can lead to mercury toxicity. My revised mercury detoxification protocol, which incorporates the work of Dr. Shade, supports your glutathione system and all of the enzymes and transporter proteins that must be working properly if your body is to efficiently cleanse itself of mercury. You can get all the details in my revised protocol to detoxify your body from mercury exposure.

### Resources to Help You Find a Biological Dentist

The following organizations can help you to find a mercury-free, biological dentist:

- Consumers for Dental Choice
- International Academy of Biological Dentistry & Medicine (IABDM)
- <u>Dental Amalgam Mercury Solutions (DAMS)</u> E-mail them at: <u>dams@usfamily.net</u> or call 651-644-4572 for an information packet
- Huggins Applied Healing You'll need to fill out a form and they will connect with you to find a suitable dentist in your area
- Holistic Dental Association
- International Association of Mercury Safe Dentists

# Forward-Thinking Government Agencies Urging a Phase-Out of Mercury in Dentistry

For example, in a letter to EU member state representatives and dental experts, the EEB asked recipients to support a phase-out of the use of mercury in dentistry, both in the EU and around the world. The EU has been aggressive in both their intent and actions aimed at reducing mercury usage, and even adopted a mercury strategy in 2005, which contains 20 measures to reduce mercury emissions, cut supply and demand protections against exposure.

The EEB letter came on the heels of a July 2012 European Commission report by BIO Intelligence Service (BIOS),<sup>5</sup> which also recommended the phase-out of dental amalgam and mercury in button cell batteries.

Sweden has already phased out dental mercury, and several other European countries have either significantly reduced its use or have imposed restrictions on it. The fact that amalgam releases so much mercury into the environment is one reason why WHO is working to facilitate "a switch in use of dental materials" away from amalgam. They, too, noted that **dental amalgam raises** "general health concerns." The WHO report observed:

"According to the Norwegian Dental Biomaterials Adverse Reaction Unit, the majority of cases of side-effects of dental filling materials are linked with dental amalgam."

With dental mercury uncontrollably entering the environment from multiple pathways, phasing out amalgam and transitioning to non-mercury alternatives is the only way to phase down – and eventually eliminate – this significant source of mercury that threatens our environment and ultimately our health.

This is why support for Consumers for Dental Choice, which has worked to educate the government about dental mercury pollution and the many mercury-free alternatives to amalgam, is now more important than ever. Consumers for Dental Choice leads the battle for mercury-free dentistry both in the U.S. and worldwide, especially at the UN mercury treaty negotiations. Its financial needs are greater than ever, so we ask for your help! Please consider a donation to Consumers for Dental Choice, a 501(c)(3) non-profit organization dedicated to working for mercury-free dentistry for every child and every adult.

<u>Donations can be made online here</u>. Checks can be mailed to:

Consumers for Dental Choice 316 F St., N.E., Suite 210 Washington DC 20002

Also, for timely updates and information, please join Consumers for Dental Choice on Facebook.