International Academy Oral Medicine & Toxicology

The video presentation titled *Smoking Teeth = Poison Gas* highlights more than a decade of scientific research funded by the IAOMT that is the basis for our statement of concern regarding the amount of mercury leaking from set silver amalgam fillings.

Voice Over:

All mercury/silver fillings leak substantial amounts of mercury constantly. The amount increases with any kind of stimulation and, as a result, mercury from fillings produces the majority of human exposure to mercury. 1 2 3

The International Academy of Oral Medicine and Toxicology is extremely concerned about the anecdotal claims of safety by manufacturers and dental trade associations that are at variance with the published peer-reviewed scientific evidence to the contrary. The Precautionary Principle requires action once the possibility of harm exists. It does not require the proof beyond a shadow of a doubt that, in the case of heavy metal and xenobiotic exposure, is both nearly impossible and unnecessary in our opinion.

What you are seeing is mercury vapor coming off a 25-year-old silver amalgam filling in an extracted tooth. The background is a phosphorescent screen. The mercury vapor absorbs the fluorescent light, and you can see its shadow.⁶

This is mercury coming off a filling that was dipped in water that is the same temperature as the human body, $98.6^{0.7}$

This is a filling that was rubbed with a pencil eraser for just a few seconds -- like going to the hygienist and having her clean your teeth.

These are not small amounts of mercury. If you can see it, it's more than 1,000 times higher than the Environmental Protection Agency (EPA) will allow for the air that we breathe.⁸



What about the last time you went to the dentist and they drilled on your tooth?⁹ 10

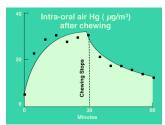
(Dr. Eichman demonstrates with a pocketknife)

Here is the mercury vapor every time you immerse it in 110° water coffee or hot tea . . . or even chew on it.

Mercury comes off fillings every time you stimulate them. ¹¹ ¹² ¹³ ¹⁴ ¹⁵ And that stimulation causes the mercury to continue to leak out of the fillings for an hour and one half at a minimum.

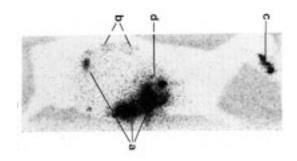
Some people grind their teeth. Some people chew gum.

The dentist might send an old gold crown to the dental lab to be welded. How about the dental personnel? They are not given informed consent.



Back in 1985, the International Academy of Oral Medicine and Toxicology set out to determine the amount of mercury that was coming off fillings . . . and here is the graph . . . showing that substantial quantities of mercury were measured coming off fillings. ¹⁶ And then we estimated the total dose. ¹⁷

Then we began animal experiments, and put radioactive fillings in sheep. ¹⁸ Mercury accumulated in the jaw, stomach, liver and kidney of the sheep in just 30 days. Substantial quantities of mercury spread from the fillings to every organ in that sheep's body. This should be cause for concern for everyone.

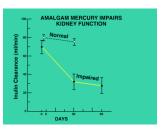


Then we measured that the sheep's kidneys dropped in their ability by 60% to clear inulin – an indication of kidney malfunction.¹⁹



Whole body imaging of monkeys found exactly the same thing.²⁰

Proponents of amalgam fillings claimed that "sheep chew too much".²¹



Well, what's the problem with monkeys?

They had mercury in their jaw, kidneys, liver, intestine and heart.

And further research found dystrophic bacteria that were antibiotic resistant cropped up in the intestines within two weeks of receiving these mercury-leaking fillings. Further studies have found damage to the ADP-ribosylation of brain neuronal proteins. Further studies have found damage to the ADP-ribosylation of brain neuronal proteins.

In response to the controversy, and at the request of the Federation of Experimental Scientists and Biologists, Drs. Lorscheider and Vimy wrote an editorial, the first ever in

FASEB, that point-by-point refuted the claims of the amalgam proponents.²⁷

Dental Seafood Other fiir 6 Water

In 1991 the World Health Organization acknowledged that the predominant source of human exposure to mercury is your

fillings.²⁸ They estimated the average daily dose from a dozen fillings is 17 micrograms/Hg.

That should be of concern to anyone wanting to have healthy children, because mercury is highly damaging to fetuses.

Experiments in sheep showed that mercury from the sheeps' fillings transferred immediately to the placenta, to the unborn fetus, and to every conceivable portion of the fetus' body.²⁹ It even increased further in the lamb after it was born due to mercury in the mother's milk.³⁰ There is no such thing as a safe mercury filling. All mercury fillings leak mercury.

The combined effect of mercury, cadmium, and lead is just now being investigated . . .but it is not one and one.³¹ One and one may make 100 or 1,000.

Why is that of concern?

Over and over again, we've heard that children are exposed to lead from our environment. Mercury and lead together are many times more toxic than just mercury alone. 32 33

These black, corroded, pitted, mercury fillings are used, where you must drill away a third of the tooth to fix a pinhead-sized cavity.

Even if you love mercury, it's the wrong thing to do to children. It leads to broken, diseased, root canalled, extracted teeth throughout the rest of the patient's life. It is a blunder that costs the child all through their life. Millions and millions of dollars are spent annually fixing the teeth again and again.

And dentists don't follow the manufacturer's recommendations.³⁴ They pack mercury into children, around gold crowns, underneath bridges. They stuff it around under the gum, in contact with tissues.

There is mercury spreading from this gold crown to every tissue in that patient's body. ³⁵ Even if you love mercury, putting that kind of filling in the tooth is simply the wrong thing to do.

Dr. Harold Löe, the former director of the U.S. National Institute for Dental Research, back in 1993 wrote, "The first filling is a critical step in the life of a tooth. Using amalgam for the first filling requires removing a lot of the tooth substance, not only diseased tooth substance but healthy tooth substance as well. So in making the undercut you sacrifice a lot, and this results in a weakened tooth. The next thing you know the tooth breaks off, and you need a crown. Then you need to repair the crown . . . and so it continues to the stage where there is no more to repair and you pull the tooth.

"With the first filling you should do something that can either restore the tooth or retain more healthy tooth substance. Use new materials – composites or materials you can bond to the surface without undercuts. You can do this with little removal of the tooth substance so that the core of the tooth is still there."

I would add that the cost all of that dental repair, over and over again, makes the cost of mercury fillings enormous . . . even if we don't consider the neurological impairment and the brain damage that they surely cause in dental personnel and the infertility and the heartbreak that they cause to so many families. ^{37 38 39 40 41 42 43 44 45}

It is the opinion of this academy that responsible government agencies should prohibit the use of these fillings until such time as their manufacturers produce the alleged evidence of safety.

A presentation by the IAOMT. Our motto is: *Show me the science*.

The IAOMT has called for a moratorium on the use of mercury-leaking fillings. ⁴⁶ We also caution patients about the careless removal of old mercury/silver fillings. If the proper patient protection protocols are not followed, everyone present, including the patient, the assistant and the dentist, will be exposed to high levels of poisonous mercury vapor gas.

End of Voice-over:

The extended version of *Smoking Teeth* contains interviews with the following Doctors:

- 1) James Harrison, DDS Lake Worth, Florida
- 2) John Pittman, MD Raleigh, North Carolina
- 3) John Wilson, MD Asheville, North Carolina
- 4) Paul Rubin, DDS Seattle, Washington
- 5) Marcia Basciano, Downers Grove, Illinois
- 6) Boyd Haley, PhD Lexington, Kentucky
- 7) John Rowe Washington, DC
- 8) David Kennedy, DDS San Diego, California
- A) If you would like a referral to a dentist who is familiar with the International Academy of Oral Medicine and Toxicology's Patient Protection Protocols, contact the U.S. Office. Contact (mailto:info@iaomt.org)
- B) You may also order a VHS or DVD version of this presentation. (mailto:info@iaomt.org)
- C) Bulk orders of are available at a substantial discount.

The mercury release demonstration was made by Roger Eichman, DDS, at the IAOMT Symposium 2000 in Oxford England using a mercury-vapor miner's light (fluorescent tube) and a stimulated phosphorescent screen background activated by ultraviolet light.

The video was filmed, produced and directed by David Kennedy, DDS FIAOMT.

Graphic, Flash conversion and Video Art by Raymond Blavatt.

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Thus, as formulated here, the principle of precautionary action has 4 parts:

- 1. People have a duty to take anticipatory action to prevent harm. (As one participant at the Wingspread meeting summarized the essence of the precautionary principle, "If you have a reasonable suspicion that something bad might be going to happen, you have an obligation to try to stop it.")
 - 2. The burden of proof of harmlessness of a new technology, process, activity, or chemical lies with the proponents, not with the general public.
- Before using a new technology, process, or chemical, or starting a new activity, people have an obligation to examine "a full range of alternatives" including the
 alternative of doing nothing.
 - 4. Decisions applying the precautionary principle must be "open, informed, and democratic" and "must include affected parties."
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^{1.} Eggleston DW, Nylander M, Suffin SC, Martinoff JT, Rieders, MF. Correlation of dental amalgam with mercury in brain tissue. J Pros Dent 58:704-7, 1987

^{2.} Nylander, M., et al. Mercury Concentration in the Human Brain and Kidneys in Relation to Exposure from Dental Amalgam Fillings. Swedish Dental Journal; 11:179-187 1987

^{3.} Friberg, Nylander, Clarkeson "Biological monitoring of Toxic Metals" Chapter 35 on Inorganic Mercury 1988

^{4.} JADA, Special Report When your patients ask about mercury in amalgam Vol. 120, p 395-398 April 1990

^{5.} The Precautionary Principal is a new principle for guiding human activities, to prevent harm to the environment and to human health, has been emerging during the past 10 years. It is called the "principle of precautionary action" or the "precautionary principle" for short.

[&]quot;The process of applying the Precautionary Principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action."

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The use of amalgam is contraindicated;

In expectant mothers.

In children 6 and under

In proximal or occlusal contact to dissimilar metal restorations.

In patients with severe renal deficiency.

In patients with known allergies to amalgam.

For retrograde or endodontic filling.

As a filling material for cast crown.

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