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Mercury Fillings Raise Mercury Levels Throughout Your Body

Analysis by Dr. Joseph Mercola | June 08, 2026

STORY AT-A-GLANCE

- Dental “silver fillings” are made with roughly 50% mercury, and researchers found adults with amalgam fillings carried significantly higher blood mercury levels than people without them
- The study showed that mercury exposure rose as the number of amalgam filling surfaces increased, meaning every additional filling added to the body’s toxic burden
- Mercury vapor released from fillings travels through the bloodstream, crosses into the brain and placenta, and accumulates inside tissues over time even when blood tests appear relatively normal
- Everyday habits such as chewing gum, grinding your teeth, and drinking very hot beverages increase mercury vapor release from amalgam fillings and raise ongoing exposure
- Choosing mercury-free dentistry, avoiding unsafe removal procedures, and supporting efforts to ban amalgam nationwide help reduce long-term mercury exposure for you and your family

When your dentist says "silver filling," picture this instead: a paste that's half mercury by weight — the same neurotoxin that closed down hat factories in the 1800s and triggered international treaties in the 2010s. Yet it's still being drilled into American teeth,

including children's, every single day. That detail rarely comes up at the appointment, and most patients walk out of the office not knowing what was just placed inside their mouth.

An analysis published in Clinical Chemistry and Laboratory Medicine set out to answer a question that should have been settled decades ago: do these fillings actually raise mercury levels inside the human body?[1] Researchers turned to a large, nationally representative dataset of American adults, measured mercury directly in blood and urine, and compared people with amalgam fillings to people without them. What they found has serious implications for how Americans think about routine dental care.

Mercury attacks your body on three fronts: it inflames the nervous system, damages the kidneys that filter it out, and poisons the mitochondria — the tiny power plants inside every cell that produce your energy. That last point explains why fatigue is so often the first symptom: when your cellular engines sputter, everything else slows down with them.

Its symptoms — fatigue, brain fog, headaches, trouble concentrating, irritability, and disrupted sleep — are so easily blamed on aging, stress, or a busy schedule that the underlying cause often goes unrecognized for years. Once mercury enters your body, it doesn't stay put. It slips past the blood-brain barrier, crosses the placenta during pregnancy, and quietly accumulates in tissues over time.

That's why the growing movement toward mercury-free dentistry is gaining ground. Below, I'll walk you through exactly what the researchers discovered, what it means for you if you already have amalgam fillings, and the practical steps you can take to lower your exposure starting today.

Before you finish reading, make sure you reach the action alert near the end of this article. A national push to ban mercury fillings is underway right now, and public comments to federal regulators could help decide whether this outdated practice finally disappears from U.S. dentistry.

Mercury Levels Climbed as Fillings Added Up

For the study, investigators analyzed data from 1,377 adults ages 18 to 70, representing more than 180 million weighted Americans, meaning the smaller study group was statistically adjusted to reflect the larger U.S. adult population. Instead of relying on guesswork or self-reported symptoms, the researchers measured actual mercury concentrations in blood and urine samples, then compared people with amalgam fillings to people without them.

- **Adults with amalgam fillings carried measurably higher mercury levels —** The researchers found that nearly 61% of adults fell into the "amalgam exposed" group, meaning they had at least one mercury filling surface. Blood mercury concentrations rose significantly in those adults compared to people without amalgam fillings. Blood total mercury levels were 1.34 times higher, while inorganic mercury — the form most closely linked to dental amalgams — was 1.33 times higher in the exposed group.

- **More fillings meant more mercury circulating in blood —** Researchers identified a direct relationship between the number of amalgam surfaces and blood inorganic mercury levels. Every additional filling surface added more mercury burden to the bloodstream. Inorganic mercury is not the same as the methylmercury commonly linked to fish exposure. The study showed dental fillings acted as their own unique source of mercury exposure inside the body.

- **Investigators estimated how much mercury vapor people absorbed daily —** Researchers used a mathematical system that estimates how chemicals move through the body to calculate daily mercury vapor exposure from amalgams. They factored in body weight, urine mercury levels, and urine flow rates to estimate how much mercury vapor adults absorbed each day.

- **Some adults exceeded federal safety thresholds —** Earlier findings referenced in the study estimated that about 16 million adults received mercury vapor exposures above the U.S. Environmental Protection Agency (EPA) safety limit from amalgam

fillings alone. Even more alarming, researchers noted California's mercury vapor safety threshold is roughly 10 times stricter than the federal EPA limit. That gap highlights how differently agencies define "safe" exposure.

- **Pregnant women faced elevated exposure too —** The paper referenced previous analyses showing roughly 36% of pregnant women carried amalgam fillings, and about 600,000 pregnant women exceeded the EPA mercury vapor limit from dental amalgams. That becomes especially concerning because mercury crosses the placenta and reaches the developing fetus.

Mercury Moves Through Your Entire Body Once It Leaves the Filling

Researchers explained that mercury vapor enters through the lungs, rapidly absorbs into blood, and then spreads into tissues and organs throughout the body. Your bloodstream essentially becomes a transport system that carries mercury everywhere.

Mercury vapor dissolves into fatty tissues — including the brain, which is roughly 60% fat — and spreads through cell membranes with almost no resistance. That allows it to cross the blood-brain barrier and enter the brain, while also crossing the placental barrier during pregnancy. Once mercury enters tissues, it oxidizes — meaning it changes form chemically — which traps it inside cells and makes removal much harder.

- **Blood tests only show part of the problem —** Researchers warned that blood mercury levels don't fully reflect how much mercury accumulates in organs and tissues. They cited earlier autopsy research showing the number of amalgam fillings correlated with tissue mercury levels even when blood measurements did not. Your bloodwork could look relatively modest while mercury still accumulates inside organs over many years.

- **Scientists ruled out several common confounding factors —** The investigators adjusted their statistical models for age, sex, ethnicity, body weight, and country of birth to make sure the mercury findings were not explained by unrelated variables.

Even after those adjustments, the relationship between amalgam fillings and mercury exposure remained strong.

- **The researchers directly called for reducing amalgam use —** Investigators stated that "efforts should be made to reduce/eliminate the continued use of amalgams." They also recommended that people who want to lower mercury exposure consult dentists trained in safe amalgam removal. This is an important detail because improper drilling releases large bursts of mercury vapor directly into the air you breathe.

- **Your daily habits influence how much mercury releases from fillings —** Every bite, chew, and clench releases a small puff of mercury vapor — invisible, odorless, and inhaled directly into your lungs. Over a lifetime of three meals a day, that's roughly 65,000 chewing sessions per decade, each one adding to a cumulative dose your body didn't ask for. Hot drinks and chronic gum chewing raise exposure further because heat and friction accelerate mercury vaporization.

Make Mercury-Free Dentistry Your Baseline

Reading this with a mouthful of amalgam fillings is unsettling. The good news is that mercury exposure isn't permanent destiny; your body has real defenses, and the choices you make starting today determine whether your burden grows or shrinks.

1. **Treat mercury fillings like any other toxic metal exposure —** Before choosing a new dentist, ask: "Does your office place mercury amalgam fillings on patients?" If the answer is yes, keep looking. Mercury doesn't belong in your teeth any more than lead belongs in your drinking water.

   Don't let the term "silver filling" soften the reality of what's inside your mouth. Amalgam fillings contain roughly 50% mercury by weight. Choosing a mercury-free dentist immediately lowers your future exposure and protects your family from unnecessary toxic burden.

2. **Walk away from deceptive language and outdated practices —** If a dental office avoids the word "mercury" entirely, pay attention. Clear language matters because informed consent matters. You deserve to know exactly what material goes into your body before a drill ever touches your teeth.

   If you're a parent, this becomes even more important. Children absorb toxic exposures differently than adults because their brains and nervous systems are still developing. Refusing outdated materials protects more than your own health. It changes demand in the marketplace and pressures clinics to modernize.

3. **Challenge insurance plans that default to mercury fillings —** Many dental plans still reimburse amalgam as the cheapest standard option. That financial pressure keeps mercury dentistry alive. Before treatment begins, ask your insurer exactly which materials are covered and whether mercury-free alternatives qualify for reimbursement.

   If your plan penalizes you financially for choosing mercury-free care, create a written objection trail. Send a short letter or email to member services, your employer benefits department, or your state Medicaid office if applicable. Insurance companies track complaints carefully. Enough documented objections force policy reviews and coverage changes over time.

4. **Lower mercury vapor exposure if you still have amalgam fillings —** If removal isn't financially realistic right now, focus on reducing vapor release day by day. Avoid chewing gum constantly, especially on the side with amalgam fillings. Limit very hot drinks directly against those teeth because heat increases mercury vaporization.

   Refuse whitening, deep cleaning, or polishing procedures performed directly over amalgam fillings. Both the abrasion and the bleaching chemistry can spike mercury vapor release in the moment, meaning a 30-minute hygienist visit can deliver a mercury dose that takes your body weeks to process.

Most important, avoid casual drilling by dentists who don't follow strict safe-removal protocols. Improper removal creates a massive short-term mercury exposure spike that can overwhelm your lungs and nervous system. These steps buy you time while you find a qualified biological dentist and get your health in the right place for safe removal.

5. **Create pressure that dentists and insurers can't ignore —** Call local dental offices and ask one direct question: "Does your office place mercury amalgam fillings?" Share the answers with friends, family members, coworkers, and parents at your child's school. Leave positive reviews for clinics that practice completely mercury-free dentistry.

   Markets shift when patients change their behavior. Dentists notice when people start choosing offices based on mercury-free policies, and insurers notice when enough members reject amalgam coverage. Every conversation, review, and phone call chips away at the system that keeps mercury in people's mouths. Once enough people reject the default, the default changes.

Choose a Biological Dentist for Further Care

Biological dentists have undergone training that equips them to view and treat your oral health as an integral part of your overall health. They're also trained how to safely remove mercury fillings. The unsafe removal of your mercury fillings could expose you to toxic amounts of poisonous mercury.

Before scheduling amalgam removal, work with your integrative practitioner to ensure you're healthy and your body's detoxification pathways are well supported; this typically means optimizing nutrition, gut health, and mineral status.

The reason for this preparation is practical: during removal, even with proper safety protocols, some additional mercury exposure is possible. A body that is nutritionally depleted or under immune stress will handle that exposure less efficiently. To help you on your search for a biological dentist, refer to the resources below:

- Consumers for Dental Choice
- Dental Amalgam Mercury Solutions (DAMS) — Email them here or call 651-644-4572 for an information packet
- Holistic Dental Association
- Huggins Applied Healing
- International Academy of Biological Dentistry and Medicine (IABDM)
- International Academy of Oral Medicine and Toxicology (IAOMT)
- International Association of Mercury Safe Dentists
- Talk International

Action Alert: Tell the FDA to Ban Mercury Fillings Now

Consumers for Dental Choice, leader of the national and world campaign against mercury in dentistry, filed a petition with the U.S. Food and Drug Administration (FDA) to ban amalgam nationwide. My friends, I ask for your help: now is the time to write the FDA and call for action.

Composed 50% of the neurotoxin and reproductive toxin mercury, amalgam does not belong in modern dentistry. Nonetheless, it's still being used in the U.S. even in children, who are most susceptible to amalgam's toxic effects. That's why over the past 15 years, I've teamed with my friend Charlie Brown to defeat the dental mercury lobby.

His nonprofit organization Consumers for Dental Choice has had spectacular successes, including an amalgam ban in the entire 27-country European Union. But we must finish the job: Ban amalgam for every American.

Now it's your turn at bat. You can submit comments to the FDA voicing your support for a ban on mercury fillings. Then tell your story! Was a child you know subjected to this mercury product? Were you misled by the "silver fillings" deception? Were you harmed by amalgam? Are you a health professional who supports mercury-free dentistry? Here's how to get your comments in front of FDA:

1. Go to **Regulations.gov**.
2. In the "Comment" section, state your city and state and why you think FDA should ban dental amalgam.
3. Answer the two required questions (the others are not required!): "Tell us about yourself" (just a multiple-choice question) and confirm that "I'm not a robot."
4. At the bottom of the page, click the blue "Submit Comment" button.

As consumers and patients, parents and grandparents, dentists and other health professionals, and concerned community members adversely affected by this toxic mercury product, you have an important message. FDA needs to hear from you. Need ideas to get started on your comment? Consider these themes:

- I urge FDA to ban amalgam because ...
- Amalgam poses an unreasonable risk because ...
- Amalgam was placed in my child's teeth when he/she was (x) years old, a risk I would not have taken had I known about amalgam's mercury because ...
- Amalgam was placed in my teeth while I was pregnant, breastfeeding, or planning to become pregnant, a risk I would not have taken had I known about amalgam's mercury because ...
- Amalgam was placed in my teeth even though I have a kidney impairment or neurological disorder, a risk I would not have taken had I known about amalgam's mercury because ...
- Amalgam damaged my teeth by ...

- I'm a dentist and I've practiced mercury-free dentistry for (x) years because ...
- I did not know about the mercury in amalgam because of the dental industry's deceptive practices like ...
- Had I known that amalgam contained mercury I would have chosen mercury-free fillings because ...
- Everyone has a right to mercury-free dentistry because ...

FAQs About Mercury Dental Fillings

Q: Are "silver fillings" actually made with mercury?

A: Yes. Dental amalgam fillings, commonly called "silver fillings," are composed of about 50% mercury by weight. The remaining material usually includes metals such as silver, tin, and copper. Mercury is the largest single ingredient, yet many patients don't hear the word "mercury" during dental appointments.

Q: Do mercury fillings really raise mercury levels inside my body?

A: Yes. The study published in Clinical Chemistry and Laboratory Medicine found that adults with amalgam fillings had significantly higher blood mercury concentrations than adults without them.[2] Researchers also found that mercury levels increased as the number of amalgam filling surfaces increased. The findings showed that dental amalgams act as an ongoing source of mercury exposure inside the body.

Q: How does mercury from fillings spread through the body?

A: Mercury vapor releases from amalgam fillings during chewing, teeth grinding, and exposure to heat from hot foods or drinks. After inhalation, the vapor rapidly enters the bloodstream and travels into organs and tissues throughout the body. Researchers explained that mercury crosses the blood-brain barrier and placenta easily, then becomes trapped inside tissues over time.

Q: What symptoms are linked to mercury exposure from amalgam fillings?

A: Mercury exposure is associated with symptoms such as fatigue, brain fog, headaches, poor concentration, irritability, and sleep disruption. Long-term exposure also places stress on the nervous system, kidneys, and mitochondria, which are responsible for producing cellular energy. Many people dismiss these symptoms as aging or stress and don't connect them to chronic mercury exposure.

Q: What should you do if you already have mercury fillings?

A: Don't rush into unsafe removal. Improper drilling releases large bursts of mercury vapor directly into the air you breathe. Instead, focus first on lowering daily exposure by avoiding gum chewing, limiting very hot foods and drinks against amalgam fillings, and avoiding whitening or polishing procedures on those teeth. When you're ready for removal, choose a dentist trained in safe mercury removal protocols and mercury-free dentistry.

Sources and References

- [1, 2] Clinical Chemistry and Laboratory Medicine October 20, 2025, Volume 64, Issue 2