

March 19, 2025

Tewksbury MA Board of Health:

Removal of Fluoride in the Drinking water: YES!

On the issue of fluoride in drinking water, my professional and personal opinion is YES, it needs to go.

Credentials: I have BSBME degree in Biomedical Engineering from Worcester Polytechnic Institute, MA and have worked in medical device industry for over 20 years. I've also worked in the chemical industry, in a personal care products company, the electronic components industry and currently work in alternative health. I've held various positions and seen both sides of the equation, big business, small business, western medicine practices, alternative medicine, corporate greed, etc. I believe I have a unique perspective to share on this issue based on my experiences.

I spent most of my career working as a Regulatory/Quality engineering professional in the medical device industry for C. R. Bard, Medtronic, Hewlett Packard medical division, Agilent technologies Medical, Philips Medical and consulted for other medical device companies, including start-ups. I worked primarily with Research & development teams and was responsible for data review, failure modes and effects analysis (FMEA), product and process validations and provided documentation for the FDA and European regulatory bodies (TUV) for 510 K, PMA and IDE submissions of medical device products, ISO compliance, and auditing. I have expertise in these areas as well as competent statistical data analysis and results conclusions. I've also spent time in live Heart Catheterization procedures, with marketing and designing of clinical trials.

Credentials are a funny thing. One thing I learned is that even if you're credentialed in something, you must have the critical thinking skills to see outside the box. Given such varied experiences amongst different industries, critical thinking is something I feel I have excelled at and what I learned is that the "science and data" can be very easily manipulated to show any story that you wish to show i.e. is biased to whoever's performing the science.

I love it when so-called "experts" want to call out one side of the scientific community's data to support their opinions without also making room for the bias or the alternative perspectives. No science is "perfect or settled" and all studies work to provide data that supports their forgone conclusions, and will work tirelessly to do so, for profit, recognition, ego, etc. Some companies will take huge risks pushing things through counting on the "fine" for doing so is less than the profit they made in the meantime. I know, I've witnessed it. For example, if you work for a company that is developing a medical device or putting a pharmaceutical product on the market, the data will support that submission in the bias of the company that is providing the information. That being said, the bias has to be considered with respect to what the scientific information and the person, providing that information have to gain by sourcing that data to support an opinion.

So how does this relate to fluoridation in drinking water?

Fluoride is not a substance naturally found in the body nor mimics any substance in the body responsible for any benefit when ingested. Fluoride is considered a **drug** by the FDA and the fluoride used in our water drinking systems is actually derived from industrial waste by-products. Hydrofluorosilicic acid (HFSA), is a by-product of phosphate fertilizers, non-pharmaceutical grade, lacks any filtration or purification nor supported by any studies showing safety and

effectiveness to today's standards. The forms of HFSA have been found to contain arsenic and linked to leakage of lead from old iron pipes. Control of the concentration in water supplies varies significantly based on type of injection equipment system being used, daily water usage, and temperature fluctuations at the water treatment plants. Interestingly enough, there are very few, if any studies that show safety and efficacy of this **drug** that has been put into our drinking water for decades. Controls for pharmaceutical drugs are required and this application of "fluoridation" has never had the rigorous proper studies to even justify it being in our water systems. In addition, all drugs have side effects and informed consent must be provided when administering such drugs.

Essentially, we are being drugged on a mass scale with no informed consent or proper data to support this practice, which is a requirement of the pharmaceutical industry and government policy. In fact, most of the current supply of HFSA comes from China, opening up a potential avenue for biological warfare, another argument supporting its removal from public water supplies! So now we have fluoride-a drug, containing arsenic and lead, 2 known "poisons", added to our drinking water and exposing us to these known harmful contaminants.

Ingesting fluoride is completely unnecessary for the proper building of teeth and bone which our body so beautifully is capable of doing on its own. It has been shown, albeit with weak evidence that topical fluoride treatments can be somewhat beneficial. The fluoride toothpaste tube has printed warnings against swallowing the toothpaste. Why in the world would there be a warning not to swallow if it were safe to ingest. Each year there are hundreds of reports to poison control centers due to excessive fluoride toothpaste ingestion mostly in children presenting with symptoms, such as gastrointestinal distress, vomiting, and diarrhea. In fact, it has been shown by numerous well designed scientific studies that fluoride can be harmful to one's health, especially babies, children and unborn fetuses. This is important because many people using formula for their babies are using fluorinated water which can do irreputable damage to a baby's health. It is now recommended by many dental professionals to new mothers to use non-fluoridated water when mixing formula. The tragedy of that is, it's not public knowledge, and most parents are unaware. Why is that?

There should be a big red warning sticker on the top of your water faucet or the baby bottles used to mix up formula, or the packaging of the formula itself perhaps.

Other Health Effects:

Dental fluorosis: the CDC has seen skyrocketing rates of Dental fluorosis in 12 to 15-year-olds since 2004. The rate was 41% in 2004 and it has skyrocketed up to 65% reported in a 2015-2016 survey and currently is in the range of 70% in US children. Compared to most of the world 70% of USA is subject to fluorinated water while, in contrast most developed nations, including 100% of Japan and 97% of Western Europe do not fluoridate their water and the tooth decay rates of non-fluoridated countries is lower than the fluoridated ones. Source: WHO collaborating center for education, training and research in oral health, Malmo university Sweden, April 2024. Unfortunately, I happen to have experienced this firsthand. My 21-year young son has had teeth issues since his permanent molars erupted. His enamel was mal formed and had severe fluorosis on his rear teeth. We have spent thousands of dollars out of pocket trying to save his teeth. We had tried sealants, caps, fillings and finally he has 2 crowns before he turned 21. We were told, sometimes this just happens! Now we know the what the most likely cause was for this and we are left with the bill and he has paid the price with all the dental work he's had to endure, which has not been a pleasant experience.

Neurotoxicity has been studied extensively with over 600 research papers showing that there is damage to the brain, such as reduced intelligence, impaired capacity to learn/remember, neurobehavioral deficits, impaired fetal brain development, and dementia to name a few.

Calcification due to accumulation of fluoride has been shown in damaged teeth, bones, the pineal gland, and coronary arteries. Bone cancers have even been linked to excessive fluoride intake.

Effects to the brain, endocrine system, dental, skeletal, kidney, liver, gastrointestinal, arthritis, heart, cancer, diabetes, hypersensitivity, and acute toxicity.

According to the CDC data “children drinking water treated with fluoride are at a 20% greater risk of exceeding the hazard threshold for lead in the blood “. We remove lead paint from old houses, yet we allow it in our drinking water. As a matter of fact, I recall a recent notification from the town of Tewksbury warning of the potential of excess lead in our water because of old pipes and we should have it tested at our own expense. Fluoride/iron pipe leaching interaction??

Benefit vs. Risk:

So who benefits by putting fluoride in the drinking water?

Big business, big pharma. The fertilizer industry for one. It was found that the release of fluorine to the environment has many detrimental effects but when contained could be used for the purposes of fluoridating water. The by-product can now be sold to cities and towns making more money and the demand would never run out. It became lucrative to sell the idea that this was good for people. If it was good topically, then it must be great ingested.

Dental industry and pharmaceutical industries can add it to toothpastes, mouthwash, fluoride treatments and if it causes tooth decay, there’s a huge secondary market for fixing all those damaged teeth. The “sick care industry” also benefits, providing plenty of patients that need to be cared for.

The implication is not that this was done purposely, what often starts as a good idea sometimes results in harm after more data becomes available (which it has). The problem is when this information becomes available, and nothing is done about it because it is too profitable, or the cost of admitting harm is too costly in terms of possible litigation etc.

Many other states and towns are setting precedent by making the decision to remove it from their water systems.

Cost: Adding Fluoride to the water system costs the taxpayers of Tewksbury considerable amount of money each year. In addition, those of us who are aware of the risks pay to remove it from our water through private filtration systems and it is extremely costly and hard to remove. We pay to put it in and take it out! The added arsenic and leaching of lead into the water also has to be controlled by the town and in the case of the lead, it appears it’s the homeowner’s responsibility to test, and pay for old iron piping systems to be removed. Finally, and most importantly there is the associated health and dental human injury which in some cases can never be repaired or remedied.

Clearly it has been demonstrated that the many risks to human health (especially children) outweigh any benefits except to those that profit from it. If an individual feels it is necessary for

them to have fluoride, that should be a personal decision and it is available through a prescription from their physician or dentist. The alternative is forced medical intervention and it violates our personal freedom and human rights. Bodily autonomy MUST NOT be violated through this process of mass medication!

The failure to remove fluoride in the Tewksbury public water system based on the volume of data alone that supports it, combined with the lack of informed consent, and the intentional addition and distribution of a substance classified as a “drug” which has known contaminants such as arsenic and lead, borders on criminal behavior by the Town of Tewksbury.

I urge the Board of Health members to support the removal of Fluoride from the Tewksbury Water Supply and end this archaic and harmful practice.

Thank you!

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References:

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