

From: Karen Spencer  
Subject: Fluoridation submission for Civic Works Committee  
Date: January 6, 2019 at 2:04:04 PM EST  
To: csaunders@london.ca, cwc@london.ca

**“Dental dogma and authoritative pronouncements aside, fluoride is not a nutrient of any kind - essential, non-essential or micronutrient. Consumption does not provide any dental benefit, and there is no such thing as a fluoride deficiency. Fluoride is best characterized as a poison that is used as a drug in a misguided attempt to prevent cavities.”** - *prologue to “Open Letter to Nutritionists About the Fluoride Deception” published October 26, 2018 by GreenMedInfo LLC*

**“Due regard is to be given to the interconnection between human beings and other forms of life, to the importance of appropriate access and utilization of biological and genetic resources, to respect for traditional knowledge and to the role of human beings in the protection of the environment, the biosphere and biodiversity.”** - *UNESCO documents in Bioethics and Protection of the Environment, the Biosphere and Biodiversity, Article 17 (2005)*

Civic Works Committee -

Let me begin with an apology on behalf of approximately half of my American countrymen for the arrogant and often dishonest interference by the US that not only worsens the lives of those living in the United States, but also for those living in Canada and elsewhere. Those disinformation campaigns are truly abhorrent.

As someone with medical reason not to consume fluoride or foods prepared with fluoridated water, I became involved in the fluoridation issue in 2014. Frankly, prior to 2014 I thought that fluoridation had been confirmed as 'safe and effective' by my government and that opponents were crazy people. I've since found out that the crazy people are those in charge of fluoridation decisions - crazy like a fox as fluoridation and fluoridation promotion are profitable for them. For the public, especially for individuals like me, fluoride robs us of our lives.

I suffered for decades with diagnoses of irritable bowel syndrome, arthritis and chronic Lyme disease. I had daily dizzy spells, regular ringing in my ears, frequent kidney pain and for the last few years, chronic bodily pain and intermittent liver pain. I was once hospitalized with a liver swollen to over twice its normal size. Finally, in a fit of desperation and in my 60s and concerned that I would soon be in a wheelchair, I gave up my high quality water filter which only reduced the fluoride in my 'optimally' treated water in favor of bottled no-low fluoride spring water which I used even to brush my teeth. In less than 2 weeks all of these symptoms were gone. All of them. Since then, if I eat out I might get a

transient pain in my foot, or a short lived neurological symptom, but that's it. No more arthritis, bowel problems or dizzy spells after decades of 'living with it.'

As an analyst, I belatedly began to do my homework. I've read actual science published in PubMed, congressional reports and legal analysis on fluoridation published in every decade. The oldest item I read was from 1914, the most recent from January 2019. There is no doubt that scientists and government knew that a significant portion of the public would have their lives ruined but ignored those medical facts because of the loss of prestige and profit the fluoridation programs provided their organizations. Government was further motivated to promote the medical myth about fluoridation by the lobbying efforts of other stakeholders who included the sugar & pharmaceutical industries as well as corporate polluters. At this point in time, I am convinced that fear of liability claims is a significant motivation for fluoridationists. It has been projected that those claims will be akin to asbestos and tobacco.

Committee members, I can't get my life back. I can't undo the harm done to my family or myself by the fluoridation deception. However, I am bound by a moral imperative to use my talents to share what I've found in order to stop the continuation of this immoral medical mandate that causes misery in millions every day and damages our environment. Moreover, it's a false dilemma. Anyone who feels topical use of fluoride is insufficient can buy a gallon of drinking water for a dollar or less. On the other hand, those of us who must avoid it spend considerably more in an effort to not even wash our food with fluoridated water supplies, let alone eat out in our communities. Fluoridation is medical assault and battery. It creates an atmosphere of fear for those of us who must avoid it and when we periodically are exposed to what government recommends as a 'public health' intervention we suffer pain, a battery.

- However, your primary responsibility as a committee has to do with infrastructure and environment. You should know that 99% of fluoridation chemicals added to drinking water goes directly to wastewater. Moreover, 100% of the fluoridation chemicals we purchase are contaminated with tramp toxins like lead, arsenic, barium, etc. This corrosive and toxic brew further erodes infrastructure, consequently imposing both economic and environmental adverse impacts on your municipality.

I've put together a pdf of 'one pagers' for you, albeit 3 of the 9 being double sided. They include citations and hyperlinks specific to both health and environment. As well as viewing them online, I suggest you print them out as a handy reference. But first, let me suggest you take the time to check out the very recent items listed below:

### **ORGANIZATIONAL OPPOSITION:**

2018 Letter with 100+ citations signed by 8 organizations: [http://](http://www.multibriefs.com/briefs/icim/nutrition.pdf)

[www.multibriefs.com/briefs/icim/nutrition.pdf](http://www.multibriefs.com/briefs/icim/nutrition.pdf)

2017 IAOMT webpage including position paper with 500+ citations: <https://iaomt.org/resources/fluoride-facts/>

### **VIDEOS ON SCIENTIFIC & HISTORICAL FACT:**

Sept 2018 presentation at Otago University by environmental scientist: <https://www.youtube.com/watch?v=h7JUYXNVmiw>

Sept 2018 presentation at Otago University by toxico-pathologist: <https://www.youtube.com/watch?v=e0o3kxZNXCw>

Sept 2018 interview about Europe: <https://youtu.be/fwukipamdxQ>

In closing, let me remind you that we once thought stuffing our schools full of asbestos was a good idea. More recently, we trusted the U.S. EPA who together with Monsanto tried to get the IARC to declare glyphosate/Round Up as safe. I'm sure most of you are aware of the emails and memos that have been uncovered that reveal collusion between the EPA and Monsanto to hide evidence of carcinogenicity to that chemical. Oh yes, there is considerable evidence of cancer from fluoride, too, although the most recent science linking long term fluoride use to dementia is even more compelling. I included a one pager on that.

It is the duty of the legislatures in both our countries to protect the individual and human rights of all its people as well as protect the environment and welfare of future generations. If any percentage of the consumers of fluoridated water suffer ill effects with the potential of ruining their lives with thyroid, kidney, autoimmune, and inflammatory diseases as well as with provoking learning disabilities and dementia, then dental dogma aside, no moral government has the right to play dice with its people's lives. To do so is a descent into the dystopian world of the *Hunger Games*.

Recommend your council consider the full picture and opt out of fluoridation policy.

Regards,

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Karen Spencer

Sign the Petition: <https://petitions.moveon.org/sign/dietary-fluoride-and/>

See the Call to Action: <http://www.greenmedinfo.com/blog/open-letter-nutritionists-about-fluoride-deception>

***More power to you if fluoridation doesn't bother you, but not the power to assume it's safe for your neighbor with kidney disease, his pregnant wife or their diabetic daughter!***

**About Karen:** Currently a consultant working with software development teams, Karen Spencer is a former analyst and project leader. She is adept at conducting research and analyzing trends. Her special interests include critical thinking, data-driven decision making, and organizational theory. She and others in her family are among the 15% of Americans with chemical sensitivities triggered by exposure to fluoridated food and drink. Karen's most recent publications were featured in:

Medical Hypotheses (2018): <https://www.sciencedirect.com/science/article/pii/S0306987718308600>

GreenMed (2017): <http://www.greenmedinfo.com/blog/science-and-alternative-facts-about-fluoridation-false-dilemmas-and-fake-news>

## CHEMISTRY LAB WORK

**SHORT ANSWER:** When fluoridationists try to tell you that the fluoridation chemicals “dissociates” into harmless and beneficial ions when added to water supplies, it’s not true. Some of the poison remains poison and some act synergistically with other components in the water to create new poisons.

**LONG ANSWER:** In 1975, Johannes Westendorf demonstrated unexpected and alarming biochemical behaviors of fluoridation chemicals in drinking water. A 1957 study published in the Journal of Dental Research coauthored by one of the leading fluoride promoters who advocated for the government 1950 endorsement of “safe and effective” confirmed that there had never been any direct testing of the chemical or biochemical effects of fluoridation under any circumstance approximating actual usage in drinking water - that everything was theoretical. A 2001 letter from Sally C. Gutierrez, Director of Water Supply and Water Resource Division at the U.S. EPA, to Dartmouth researcher, Dr. Roger Masters, verified that the biological and chemical effects of fluoridation chemicals in association with metals in water are not understood, that there are significant gaps in the science, as did the 2006 NRC. Dr. Richard Sauerheber contributed to our understanding in 2013 with a chemistry report suggesting the biological mechanisms consistent with the 2010 findings of Sawan et al. who looked at real world data that “ ....suggest that a biological effect not yet recognized may underlie the epidemiological association between increased BPb lead levels in children living in water-fluoridated communities.” Fluoridation chemicals added to water are poisons; they are registered and labeled as such with accompanying material data safety sheets (MSDS). Some remain poison, and some combines with available components in water (and in guts) to create new toxic exposures for consumers.



Westendorf, Johannes (1975) Doctoral thesis presented at the University of Hamburg, Germany, available in English translation. <http://www.fluoridealert.org/wp-content/uploads/westendorf.pdf>  
Review: <http://fluoridealert.org/studies/westendorf-foreword/>

Feldman, I, Morkin, D, and Hodge ,HC. “The State of Fluoride in Drinking Water,” Journal of Dental Research, 36:2(1957)192-202. <http://journals.sagepub.com/doi/pdf/10.1177/00220345570360020501>

Letter from Sally C. Gutierrez, Director, Water Supply and Water Resources Division, Office of Research and Development, National Risk Management Research Laboratory, U.S. EPA, Cincinnati to Roger Masters, March 15, 2001. (*included in Review of Westendorf above*)  
Masters in PubMed: [https://www.ncbi.nlm.nih.gov/pubmed/?term=Masters%20RD%5BAuthor%5D&cauthor=true&cauthor\\_uid=11233755](https://www.ncbi.nlm.nih.gov/pubmed/?term=Masters%20RD%5BAuthor%5D&cauthor=true&cauthor_uid=11233755)

Coplan MJ, Patch SC, Masters RD, Bachman MS. Confirmation of and explanations for elevated blood lead and other disorders in children exposed to water. disinfection and fluoridation chemicals. Neurotoxicology. 2007 Sep;28(5):1032-42. <https://www.ncbi.nlm.nih.gov/pubmed/17420053>

Sawan RM, et al. Fluoride increases lead concentrations in whole blood and in calcified tissues from lead-exposed rats. Toxicology. 2010 Apr 30;271(1-2):21-6. Epub 2010 Feb 25. <http://www.ncbi.nlm.nih.gov/pubmed/20188782>

Sauerheber R. Physiologic Conditions Affect Toxicity of Ingested Industrial Fluoride. Journal of Environmental and Public Health. 2013. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3690253/>

## FLUORIDATION: Rapid Transport of Toxins to the Brain

Fluoride not only easily crosses both the placental and blood-brain barriers, but also forms strong bonds with toxic metals like aluminum and lead and in so doing increases absorption of these poisons into brain and body tissue.

Fluoridation chemicals used by municipal water utilities are invariably polluted with tramp contaminants that include aluminum and lead, as well as an assortment of other poisons. Fluoride, aluminum and lead are known factors in various neurological diseases from autism and low IQ in children to Alzheimer's and Parkinson's Disease in seniors. Most of these toxins are either at 'allowable limits' or are 'not regulated' i.e. not tested for under NSF guidelines that exempts fluoridation chemicals from scrutiny. This cavalier attitude towards public health and fluoridation chemicals is necessary in order to allow fluoridation policy to continue since fluoridation chemicals are the contaminated waste product of industry, primarily aluminum and phosphate industry in the United States, China and Mexico.



"The addition of fluorides to drinking water was, and is, a mistake." - Dr. Robert Isaacson (2007)

—> What poisons are in your city's water? —> What poisons are in your brain?

Varner JA, Jensen KF, Horvath W, Isaacson RL. (1998) "Chronic administration of aluminum-fluoride or sodium-fluoride to rats in drinking water: alterations in neuronal and cerebrovascular integrity." *Brain Research*. Volume 784, Issues 1–2, 284–298. <http://www.ncbi.nlm.nih.gov/pubmed/9518651>

Hasan K, Alam S, Mirkovic J, Hossain F. (2018) "Screening of Human Proteins for Fluoride and Aluminum Binding." *Biomedical Informatics*. Vol (14) 2. <http://www.bioinformation.net/014/97320630014068.pdf>

Sawan G, Leite M, Saraiva MC, et al. (2010) "Fluoride increases lead concentrations in whole blood and in calcified tissues from lead-exposed rats." *Toxicology* Volume 271, Issue 1: 21-26. <https://www.ncbi.nlm.nih.gov/pubmed/20188782>

Mullenix PJ. (2014) "A new perspective on metals and other contaminants in fluoridation chemicals." *International Journal of Occupational and Environmental Health*. Apr-Jun;20(2):157-66. <http://www.ncbi.nlm.nih.gov/pubmed/24999851>

Opydo-Szymaczek J, Borysewicz-Lewicka M. (2007) "Research report Transplacental passage of fluoride in pregnant Polish women assessed by maternal and cord blood plasma F." *Fluoride* 40(1) 46–50. [http://www.fluorideresearch.org/401/files/FJ2007\\_v40\\_n1\\_p046-050.pdf](http://www.fluorideresearch.org/401/files/FJ2007_v40_n1_p046-050.pdf)

Brown RA, Cornwell DA, MacPhee MJ. (2004) "Trace Contaminants in Water Treatment Chemicals: Sources and Fate." *Journal of American Water Works Association*. Vol. 96, Number 12, 111-125. <https://www.awwa.org/publications/journal-awwa/abstract/articleid/15160.aspx>

Mold M, Umar D, King A, Exley C. (2017) "Aluminium in brain tissue in autism." *Journal of Trace Elements in Medicine and Biology*. <http://www.sciencedirect.com/science/article/pii/S0946672X17308763>

Toxicological Profile for Fluorides, Hydrogen Fluoride and Fluorine. U.S. Department of Health & Human Services: Public Health Service, Agency for Toxic Substances and Disease Registry. Sept 2003. <http://www.atsdr.cdc.gov/toxprofiles/tp11.pdf>





## Neurological Impact of Fluoride

*samples of 2018 studies*



Children	Adults
<p><b>DOSE RESPONSE:</b> Further validation that prenatal doses consistent with doses in 'optimal' fluoridation practice lowers IQ up to 6 points on a dose-response trend line. "Our findings add to our team's recently published report on prenatal fluoride and cognition at ages 4 and 6–12 years by suggesting that higher in utero exposure to F has an adverse impact on offspring cognitive development that can be detected earlier, in the first three years of life."</p> <p><a href="http://oem.bmj.com/content/75/Suppl_1/A10.1">http://oem.bmj.com/content/75/Suppl_1/A10.1</a></p> <ul style="list-style-type: none"><li>• Thomas D, Sanchez B, Peterson K, et al. <i>OP V – 2 Prenatal fluoride exposure and neurobehavior among children 1–3 years of age in Mexico</i>. <i>Occup Environ Med</i>. 2018;75:A10.</li></ul>	<p><b>ADULT BRAINS:</b> First long term NaF animal study (10 weeks) using moderate levels of fluoride finds a number of histological changes including in parts of the brain associated with memory and learning, as well as chemical changes affecting brain function. <a href="https://www.sciencedirect.com/science/article/pii/S0045653518317508">https://www.sciencedirect.com/science/article/pii/S0045653518317508</a></p> <ul style="list-style-type: none"><li>• Pei Jiang, Gongying Li, Xueyuan Zhou, Changshui Wang, Yi Qiao, Dehua Liao, Dongmei Shi. <i>Chronic fluoride exposure induces neuronal apoptosis and impairs neurogenesis and synaptic plasticity: Role of GSK-3b/b-catenin pathway</i>. <i>Chemosphere</i>. Volume 214, January 2019, Pages 430-435. [Online ahead of print]</li></ul>
<p><b>FLUORIDE &amp; CNS INFLAMMATION:</b> Fluorides impact on immune system and CNS causes excitotoxicity and microglial priming for the childhood emergence of neurological diseases. <a href="https://www.ncbi.nlm.nih.gov/pubmed/29721353">https://www.ncbi.nlm.nih.gov/pubmed/29721353</a></p> <ul style="list-style-type: none"><li>• Strunecka A, Blaylock RL, Patocka J, Strunecky O. (2018) <i>Immunoexcitotoxicity as the central mechanism of etiopathology and treatment of autism spectrum disorders: A possible role of fluoride and aluminum</i>. <i>Surg Neurol Int</i>. 2018 Apr 9;9:74.</li></ul>	<p><b>ALZHEIMER'S DISEASE:</b> Describes impact of fluoride-induced stress and inflammation in the development of Alzheimer's disease and demonstrates the mechanism for cell death in the progressive worsening of the disease over time. <a href="https://www.mdpi.com/1422-0067/19/12/3965">https://www.mdpi.com/1422-0067/19/12/3965</a></p> <ul style="list-style-type: none"><li>• Goschorska M, et al. <i>Potential Role of Fluoride in the Etiopathogenesis of Alzheimer's Disease</i>. <i>Int. J. Mol. Sci</i>. 2018, 19 (12), 3965.</li></ul>
<p><b>LEARNING DISABILITIES:</b> Study found attention deficit disorder in 200 individually tested children consistent with their prenatal exposure to fluoride on dose-response trend line with a ceiling effect. Excluded those with history of mental illness or complicating conditions such as diabetes and renal disease. <a href="https://www.sciencedirect.com/science/article/pii/S0160412018311814">https://www.sciencedirect.com/science/article/pii/S0160412018311814</a></p> <ul style="list-style-type: none"><li>• Morteza Bashash, Maelle Marchand, Howard Hu, Christine Till, Angeles Martinez-Mier, et al. <i>Prenatal fluoride exposure and attention deficit hyperactivity disorder (ADHD) symptoms in children at 6–12 years of age in Mexico City</i>. <i>Environment International</i>. Volume 121, Part 1, December 2018, Pages 658-666.</li></ul>	<p><b>DEMENTIA:</b> Describes the chemical mechanism by which the effectiveness of the two most popular drugs used to treat Alzheimer's &amp; other neurodegenerative dementia disease is reduced or blocked by fluoride induced oxidative stress. <a href="https://www.mdpi.com/1660-4601/16/1/10/html">https://www.mdpi.com/1660-4601/16/1/10/html</a></p> <ul style="list-style-type: none"><li>• Marta Goschorska, Izabela Gutowska, Irena Baranowska-Bosiacka, et al. <i>Influence of Acetylcholinesterase Inhibitors Used in Alzheimer's Disease Treatment on the Activity of Antioxidant Enzymes and the Concentration of Glutathione in THP-1 Macrophages under Fluoride-Induced Oxidative Stress</i>. <i>Int. J. Environ. Res. Public Health</i>. 2019, 16(1), 10. [Online ahead of print]</li></ul>

## Environmental References

“... a fluoride concentration as low as 0.5 mg F-/l can adversely affect invertebrates and fishes, safe levels below this fluoride/l concentration are recommended in order to protect freshwater animals from fluoride pollution.” - JA Camargo in “*Fluoride toxicity to aquatic organisms: a review*” (2003)

“Barium and aluminum levels approached those that the EPA found in samples of electroplating sludge, river sediment, and hazardous soils... contaminant content creates a regulatory blind spot that jeopardizes any safe use of fluoride additives.” - PJ Mullenix in “*A new perspective on metals and other contaminants in fluoridation chemicals*” (2014)

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## Environmental References

### WHAT WE KNOW:

1. We know that fluoride has an adverse impact on the migration, reproduction and mortality of salmon and trout even at 0.5 ppm in fresh water.
2. We know that laboratory experiments using zebra fish confirm fluoride in low concentrations such as 0.5 ppm adversely impacts the endocrine system of that animal model.
3. We know that approximately the same concentration has an adverse impact on some plants and aquatic life lower on the food chain.
4. We know that fluoride accumulates in brains of seabirds where it causes calcification.
5. We know that fluoride accumulation in human brains is associated with neurodegenerative conditions.
6. We know that industrial fluoride pollution contributes to the fluoride exposure.
7. We know that the fluorides added to tap water are fundamentally different compositions than the natural fluoride found in seawater.
8. We know that fluoridated water is harmful to many amphibians and reptiles, and consequently result in de-fluoridation of city water at zoos in order to reduce disease and mortality in these animals.
9. We know that fluoridated wastewater discharge from 'optimally' fluoridated communities at 0.7 ppm is frequently higher than 0.7 ppm due to a combination of factors.
10. We know that ~98% of fluoridation chemicals added to drinking water goes directly into wastewater.
11. We know that 100% of fluoridation chemicals are contaminated with other toxins such as aluminum, arsenic, barium, cadmium, lead, etc.
12. We know that despite the addition of buffering chemicals to counteract the corrosive nature of fluoridation chemicals, municipal water infrastructure in fluoridated communities has an accelerated deterioration with a net result of more chemicals and toxic metals in waste water.
13. We know that fluoride and assorted toxins accumulate in silt and anticipate fluoride can persist for a million years or more.
14. We know that smog results in ocean pollution that bleaches coral via the same type of poisoning that happens to developing teeth known as dental fluorosis. DF mottles the teeth of over half of U.S. teens. Our fluoridation chemicals are harvested from air pollution control systems in Shanghai, China - packaged air pollution.
15. We know that fluoride is an enzyme poison and an EPA contaminant identified as a developmental neurotoxicant.
  - Until the mid 1980s, 2.4 ppm was the EPA maximum contaminant level goal (MCLG) for fluoride in drinking water. The actionable maximum contaminant level (MCL) was set at the same concentration. The MCL/MCLG was increased to 4 ppm at the behest of lobbyists for polluters and municipalities who could not afford to take steps to de-fluoridate their contaminated water. The 4 ppm MCL/MCLG was objected to by EPA scientists, but was given a provisional pass by the 1993 NRC pending research that still hasn't been done. The 2006 NRC advised that 4 ppm was not protective of human health and that the gaps in knowledge make it impossible to determine a scientifically defensible reference dose for fluoride in drinking water, but there has been no EPA action to reduce the MCL/MCLG determined as harmful.
  - The Safe Drinking Water Act calls for reviews of MCLs every six years to guarantee safety.

### WHAT WE DO NOT YET KNOW:

- A. We do not yet know the long term impact of fluoridated wastewater on fresh water plants and fisheries.
- B. We do not yet know the long term impact of fluoridated wastewater on salt water plants and fisheries.
- C. We do not yet know the impact of fluoridated waste water on seabirds or plankton.
- D. We do not yet know the impact of overall fluoride pollution on ocean mammals' health, migration or reproduction.
- E. We will likely never know how to clean the fluoride out of wetlands and waters contaminated with fluoridation chemicals.

Gloucester was founded almost 400 years ago and incorporated almost 150 years ago.  
Native Americans lived and fished on Cape Ann for at least another 500 years prior to our arrival.  
"Build not for today alone, but for tomorrow as well."  
Think long term.



**2018** “There was a difference of 31.6% in dental fluorosis prevalence between 2012-2011 when compared to data from 2002-2001 in adolescents aged 16 and 17 years. The continued increase in fluorosis rates in the U.S. indicates that additional measures need to be implemented to reduce its prevalence.”

SOURCE: Wiener RC, et al. (2018). Dental Fluorosis over Time: A comparison of National Health and Nutrition Examination Survey data from 2001-2002 and 2011-2012. J Dent Hygiene. 92 no. 1 23-29

**2010** “The prevalence of very mild fluorosis increased from 17.2% to 28.5% and mild fluorosis increased from 4.1% to 8.6%. The prevalence of moderate and severe fluorosis increased from 1.3% to 3.6%”

SOURCE: Beltrán-Aguilar ED, Barker L, Dye BA. (2010) Prevalence and Severity of Dental Fluorosis in the United States, 1999–2004. NCHS Data Brief. No. 53

**1990:** “There is a growing body of evidence which indicates that the prevalence and, in some cases, the severity of dental fluorosis is increasing in both fluoridated and non-fluoridated regions in the U.S... This trend is undesirable for several reasons:

1. It increases the risk of esthetically objectionable enamel defects;
2. in more severe cases, it increases the risk of harmful effects to dental function;
3. it places dental professionals at an increased risk of litigation; and
4. it jeopardizes the perception of the safety and, therefore, the public acceptance of the use of fluorides.”

SOURCE: Whitford GM. (1990). The physiological and toxicological characteristics of fluoride. Journal of Dental Research 69 (Special Issue):539-49.



## \$ Thousands \$ in cosmetic dentistry

### Dental fluorosis among American adolescents

1945:  $\leq 3\%$

1986-1987: 22% with 1% moderate-severe

1999-2004: 41% with 4% moderate-severe

**2011-2012: 61% with 23% moderate-severe**



NORMAL



MILD



MODERATE



SEVERE

\* Dental Fluorosis costs the individual thousands, the community millions and fuels the multi-billion dollar cosmetic dentistry industry.

## Series of Studies - A Selection Suggesting Institutional Bias

The Public Health Service and CDC has known since the 1950s that fluoride both saturates the placenta and passes into amniotic fluid and the fetal blood stream. This has been noted repeatedly in government documents. See 2003 CDC ATSDR ([Section 1.6](#)). However, exploration of the implications of those medical facts has been slow in surfacing. As of this writing in Jan 2018, there are literally hundreds of studies with findings that the implications of prenatal fluoride exposure include a number of ill effects, including:

1. Increased risk of preeclampsia
2. Increased risk of pre-term birth
3. Increased risk of slightly lowered IQ in offspring
4. Increased risk of learning disabilities and mood disorders in offspring
5. Increased risk of allergies and autoimmune disease in offspring.

In 2009 and 2015, EPA scientists (Mundy et al.) confirmed that fluoride is a 'gold standard developmental neurotoxicant' - a brain poison when exposure is during critical phases of brain development. In 2017, the findings of a longitudinal NIH/NIEHS/EPA sponsored study found that in doses consistent with doses in healthy adults living in 'optimally' fluoridated communities, prenatal exposure to fluoride as determined by maternal urine results in up to a 6 point drop in IQ on a dose-response trend line (Bashash et al. 2017). The findings of this rigorous study validate the findings of hundreds of other modern neurotoxicity studies.

Attached are four studies (w/highlights), one modern and three historical, that in themselves confirm that fluoridation is neither effective nor safe for young children and pregnant women.

1. The Association of Early Childhood Caries and Race/Ethnicity among California Preschool Children. Shiboski CH, Gansky SA, Gomez FR, Pollick H. *Journal of Public Health Dentistry*. February 2003; 63(1): 38-46.
  - This large study on the pattern of cavities in Head Start children based on ethnicity mentioned several times that fluoridation made no impact on cavities. In other words, the claim that fluoridation 'helps the poor children' is false. I have much more on that.
2. Gardner DE, Smith FA, Hodge HC, Overton DE, Feltman R. The fluoride concentration of placental tissue as related to fluoride content in drinking water. *Science*. February 1952; 115(2982):208-209.
  - This post hoc study is what passed as a 'safety study.' One of the authors, Hodge, was the leading proponent of fluoridation, converting the danger threshold of 1 ppm to the 'optimal' level and moving the danger threshold to 2.4 ppm. This study found fluoride concentration in the placentas of women consuming 1 ppm fluoridated water was above 2 ppm, acknowledged they had no way to determine the fetal fluoride level, but cavalierly opined the fluoride saturated placenta posed no danger to the mother.
3. Prenatal and postnatal ingestion of fluorides - A Progress Report. Reuben Feltman, D.D.S. *Dental Digest*. August 1956. pp 353-357.
  - The best study done in that time period, the researchers determined the allergic population has a low tolerance that manifested as serious adverse effects in their test subjects. PHS researchers had to drop those test subjects and advised if in water, fluoride avoidance would be difficult. Researchers used controlled doses equivalent to fluoridated water and confirmed with placebo, it was the fluoride.
  - Case 3 closely describes my experience in 1981 beginning the week Gloucester began fluoridation during my 2nd pregnancy.
4. Prenatal and postnatal ingestion of fluorides - Fourteen years of investigation - Final report. Reuben Feltman, D.D.S. & George Kosel, B.S., M.S. *Journal of Dental Medicine*. October 1961; 16(4):190-198.
  - This final report noted that fetal fluoride levels were approximately twice, tripled and quadrupled the control group dependent on type of fluoride used in the controlled dose. Researchers had no idea what the long term implications could be in the children (12.9 mcg/L v. 26.85, 32.68, and 44.8 mcg/L).
  - Feltman & Kosel also unexpectedly noted moderate-severe dental fluorosis which is evidence of fluoride poisoning as well as delayed tooth eruption they suspected was due to thyroid suppression.
  - The PHS pulled further research funding with the statement, they 'considered fluoridation settled.'

submitted by,  
Karen Spencer  
29 January, 2018

## Public Hearing Presentation References: October 9, 2018

International Academy of Oral Medicine and Toxicology (IAOMT) Position Paper against Fluoride Use in Water, Dental Materials, and Other Products for Dental and Medical Practitioners, Dental and Medical Students, Consumers, and Policy Makers. David Kennedy; Amanda Just; John Kall;; Griffin Cole. September 22, 2017.

Pregnancy and Fluoride Do Not Mix. John D. MacArthur. CreateSpace. 2016

**Source:** Wiener RC, et al. (2018) *Dental Fluorosis over Time: A comparison of National Health and Nutrition Examination Survey data from 2001-2002 and 2011-2012*. J Dent Hygiene.

**Source:** ndoti Mavindu, et al. (2018) *Oral Hygiene Habits and Dental Treatment Needs of Children with Dental Fluorosis and Those Without Dental Fluorosis age 12-15 years in a High Fluoride Area in North Kiajiado Kenya*. Mod. Approach to Dental Oral Hygiene.

**Source:** Jiménez-Córdova MI, et al. (2018) *Evaluation of kidney injury biomarkers in an adult Mexican population environmentally exposed to fluoride and low arsenic levels*. Toxicology and Applied Pharmacology.

**Source:** Perera T, et al. (2018) *Effect of fluoride on major organs with the different time of exposure in rats*. Environmental Health and Preventive Medicine.

**Source:** Fluegge K. (2016) *Community water fluoridation predicts increase in age-adjusted incidence and prevalence of diabetes in 22 states from 2005 and 2010*. Journal of Water and Health.

**Source:** Chaker, et al. (2018) *Thyroid Function and Risk of Type 2 Diabetes: A Population-Based Prospective Cohort Study*. BMC Medicine.

**Source:** Kheradpisheh Z, et al. (2018) *Impact of Drinking Water Fluoride on Human Thyroid Hormones: A Case- Control Study*. Scientific Reports.

**Source:** Khandare AL, et al. (2018) *Role of Carbonic Anhydrase and Triiodothyronine in Dental Caries Affected Children in Fluorosis Endemic Areas*. Advances in Dentistry and Oral Health.

**Source:** Chaitanya NCSK, et al. (2018) *A systematic analysis on possibility of water fluoridation causing hypothyroidism*. Indian J Dent Res.

**Source:** Yung-gan L, et al. (2016) *Fluorosis increases the risk of postmenopausal osteoporosis by stimulating interferon  $\gamma$* . Biochemical and Biophysical Research Communications.

**Source:** Kakei M, et al. (2016) *Fluoride Exposure May Accelerate the Osteoporotic Change in Postmenopausal Women: Animal Model of Fluoride-induced Osteoporosis*. Adv Tech Biol Med.

**Source:** Levy SM, et al. (2018) *Associations of fluoride intake with children's cortical bone mineral and strength measures at age 11*. J Public Health Dent.

**Source:** Abdullatef N, et al. (2016) *Immuno Histochemical Study of Osteosarcoma Using Ki-67 as a Labeling Index in Naturally Fluoridated Community*. Adv Dent & Oral Health.

**Source:** Gesser-Edelsburg A, Shir-Raz Y. (2016) *Communicating risk for issues that involve 'uncertainty bias': what can the Israeli case of water fluoridation teach us?* Journal of Risk Research.

**Source:** Spencer K. (2017) *Science and Alternative Facts: About fluoridation, false dilemmas and fake news*. GreenMedInfo.com. Rpt. in Masters of Health. February 2018.

**Source:** Sanders AE, Slade GD. (2017) *Blood Lead Levels and Dental Caries in U.S. Children Who Do Not Drink Tap Water*. American Journal of Preventive Medicine.

**View presentation:** <https://www.youtube.com/watch?v=Ld2waQrq-qc>

K Spencer

## Public Hearing Presentation References: October 9, 2018

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**Source:** Bashash M, Thomas D, Hu H, et al. (2017) *Prenatal Fluoride Exposure and Cognitive Outcomes in Children at 4 and 6–12 Years of Age in Mexico*. Environ Health Perspect.

**Source:** “Fluoride Exposure in Utero Linked to Lower IQ in Kids.” Fluoride Action Network. October 2017.

**Source:** Thomas D, Sanchez B, Peterson K, et al. (2018) *OP V – 2 Prenatal fluoride exposure and neurobehavior among children 1–3 years of age in Mexico Occup*. Environ Med.

**Source:** Yu X, et al. (2018) *Threshold effects of moderately excessive fluoride exposure on children's health: A potential association between dental fluorosis and loss of excellent intelligence*. Environ Int.

**Source:** Kostev K, Hadji P, Jacob L. (2018) *Impact of Osteoporosis on the Risk of Dementia in Almost 60,000 Patients Followed in General Practices in Germany*. Journal of Alzheimer's Disease,

**Source:** Rajendran K, et al. (2016) *A Case of Interosseous Membrane Calcification*. J of Clinical and Diagnostic Res.

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**Source:** Gandhi D, et al. (2017) *Fluoride-Induced Oxidative and Inflammatory Stress in Osteosarcoma Cells: Does It Affect Bone Development Pathway?* Biol Trace Elem Res.

**Source:** Campos-Pereira FD, et al. (2017) *Genotoxic effect and rat hepatocyte death occurred after oxidative stress induction and antioxidant gene downregulation caused by long term fluoride exposure*. Chem Biol Interact.

### OCTOBER STUDIES NOT FEATURED

**Romero et al. 2017**

- Ashley J. Malin, Julia Riddell, Hugh McCague, Christine Till. *Fluoride exposure and thyroid function among adults living in Canada: Effect modification by iodine status*. Environment International. Volume 121, Part 1, December 2018, Pages 667-674.
- Christine Till, Rivka Green, John G. Grundy, Richard Hornung, Raichel Neufeld, E. Angeles Martinez-Mier, Pierre Ayotte, Gina Muckle, and Bruce Lanphear. *Community Water Fluoridation and Urinary Fluoride Concentrations in a National Sample of Pregnant Women in Canada*. Environmental Health Perspectives. 2018.
- Morteza Bashash, Maelle Marchand, Howard Hu, Christine Till, Angeles Martinez-Mier, Brisa N. Sanchez, Niladri Basu, Karen Peterson, Rivka Green, Lourdes Schnaas, Adriana Mercado-García, Mauricio Hernández-Avila, Martha María Téllez-Rojo. *Prenatal fluoride exposure and attention deficit hyperactivity disorder (ADHD) symptoms in children at 6–12 years of age in Mexico City*. Environment International. Volume 121, Part 1, December 2018, Pages 658-666.
- Claudia X Harriehausen, Fehmida Z Dosani, Brett T Chiquet, Michelle S Barratt, and Ryan L Quock. *Fluoride Intake of Infants from Formula*. Journal of Clinical Pediatric Dentistry. 2018.
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- P. Sudheer Shenoya, Utsav Sena, Saketh Kapoor, Anu V. Ranade, Chitta R. Chowdhury, Bipasha Bose. *Sodium fluoride induced skeletal muscle changes: Degradation of proteins and signaling mechanism*. Environmental Pollution. Available online 10 October 2018.

**View presentation:** <https://www.youtube.com/watch?v=Ld2waQrq-qc>

K Spencer



# Who benefits from fluoridation?

## *The Profiteers:*

1. **Pharma** who not only market fluoridated toothpastes and dental treatments, but also fluoridates many drugs and has an interest in maintaining a positive image for fluoride
  - Fluoride is a cheap intensifier that saves Pharma money.
  - [Baycol](#) and [Fen-Phen](#) are just two of the infamous recalled fluoridated drugs
  - [Fluoroquinolone antibiotics](#) have black box warnings.
2. **Sugar industry** who corrupted NIDR & NIH to focus on the [magic potion narrative](#) instead of recommending less sweets. Have you seen the [Crest Halloween commercial](#) that airs every October?
3. **Dentists** earn considerably more on cosmetic dentistry for adults with dental fluorosis than childhood cavities. Fluoride treatments are another money maker. Google before and after dental fluorosis. Honest dentists readily admit to this. We provided you with the personal & professional testimony of MA dentist, Dr. Evans, as well as emails from leading dentists.
  - Dentists make more money in fluoridated communities, first reported in: The Journal of the American Dental Association, Vol. 84, Feb. 1972
  - The ADA is a trade association and the [dental lobby's clout](#) rivals the gun lobby's.
5. **Businesses** tangential to fluoridation process which include distribution, equipment and additional pH balancing chemicals. Fluoride also has many industrial uses involving non-stick surfaces, textiles, fracking, etc.
6. **Fluoridation promotion** is very profitable. Hundreds of millions are spent on marketing materials and astroturf initiatives
  - The ADA and other promoters are also concerned about liability from years of promotion
  - Think Tobacco and Asbestos lawsuits
  - Even government agencies like the Dept of Health & Human Services profits. I am given to understand that their annual budget for fluoridation promotion is in excess of a hundred million dollars a year. I believe that includes the budget for the small team in the Oral Health Division of the CDC. (see attached)
7. **Vendors** & other polluters for whom safe disposal is costly with liability issues attached
  - Fluoride polluters. See [Mosaic in Florida](#) the leading US provider of fluoridation water additives. However, Gloucester gets its fluoride from Shanghai, China - packaged "Shanghai Smog."
  - The high EPA fluoride MCL and false image of fluoride as a miracle mineral benefits many industrial polluters.

**Poisoned Apple**



*Evidence, Ethics, Environment & Economics*

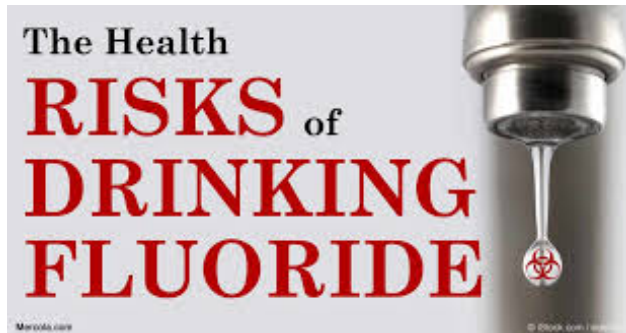


## Neurobehavioral

A rigorous NIH study confirmed the dozens of studies since 1995, that prenatal consumption of low doses of fluoride causes subtle damage to developing brains.

## Carcinogenicity

The NRC panel agreed that fluoride appears to “initiate or promote cancers.” All foods grown or prepared with fluoridated water absorb fluoride.



## Enzyme Inhibition

Scientists have known that fluoride is an enzyme poison for over a hundred years. The question becomes one of tolerance and dosage. Diabetics and others who consume more water and kidney patients who cannot excrete fluoride as effectively will carry a heavier toxic load of fluoride in their bodies and bones. Moreover, fluoride interferes with glucose metabolism and calcium metabolism. It also causes abnormal bone metabolism, the visible evidence is a permanent condition called dental fluorosis. Dental fluorosis makes teeth more brittle resulting in increased cosmetic dentistry later in life. Corrosive and reactive fluoridation chemicals also increase lead levels in bones, blood and brains because of tramp contamination, biochemistry, and chemical interaction with plumbing.

[FluorideAlert.org](http://FluorideAlert.org) & [MomsAgainstFluoridation.com](http://MomsAgainstFluoridation.com)

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  - Legal Arguments Against Artificial Water Fluoridation by Nader R. Hasan, JD with attached Affidavit on Health Effects by Kathleen Theissen, PhD, member of the 2006 US National Research Council panel on Fluoride in Drinking Water. June 23, 2014.
  - Highlights in North American Litigation During the Twentieth Century on Fluoridation of Public Water Supplies. HJR Graham & P Marin, J. Land Use and Env'tl. Law, Vol 14:2 (Spring 1999)
  - Fluoridation of Public Water Systems: Valid Exercise of State Police Power or Constitutional Violation? Douglas Balog. Pace Environmental Law Review, Volume 14, Number 2 Summer 1997.
  - Letter to National Governors Association from consumer advocate Erin Brockovich, et al. April 27, 2016.
- “The cessation of all compulsory water fluoridation schemes should be the goal of all public health agencies, ethical lawmakers, and informed citizens.”  
- Prof. Rita Barnett-Rose, JD (2014)

## Rethinking Fluoride

**It's Time to Change!**



**“...for decades we have believed that fluoride in small doses has no adverse effects on health... But more and more scientists are now seriously questioning the benefits of fluoride, even in small amounts.”**

***UNICEF - A United Nations Organization***

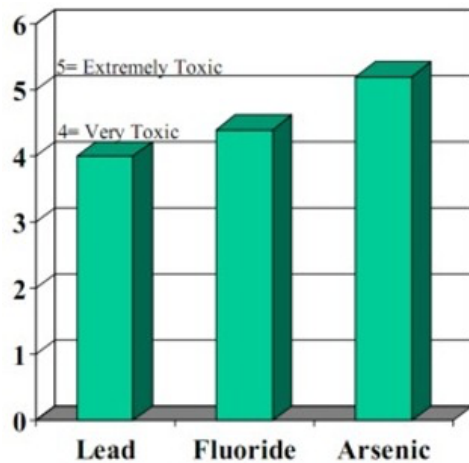
Fluoridation policy is a medical mandate decided at state and municipal levels that is willfully blind to the adverse impact on the 15-30% of consumers for whom fluoride consumption is medically contraindicated as well as to the environmental implications of contaminated wastewater.  
(July 2018)

## Inflammation

Fluoride, even in low concentrations, is an inflammatory drug. Skin rashes, gastrointestinal distress, and pain are among the earliest signs of fluoride sensitivity.

## Immunology

The 2006 NRC wrote, "There is no question that fluoride can affect the cells involved in providing immune responses." Science over the past decade agrees.



## Endocrine Disruption

The 2006 National Research Council panel found the evidence of endocrine disruption to be among the most compelling of the many adverse health impacts they documented in their report to the EPA on *Fluoride in Drinking Water*. The NRC noted there were significant gaps in the research making it impossible to identify the Lowest Observable Adverse Effect Level (LOAEL). Gaps included examining the impact of chronic low dose exposure on vulnerable groups such as pregnant women and their fetuses, bottle fed babies and young children, the elderly and those with prolonged illness. See sampling of the many studies that address that gap.

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"Fluorides make the germs in the mouth sick, and they'll make the kid sick, too."  
*Dr. David Kennedy, DDS, MPH and past president of IAOMT (2016)*

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- Water Fluoridation & Tooth Decay: Results from the 1986-1987 National Survey of U.S. Children. John A. Yiamouyiannis. *Fluoride.* 1990, 23:2.
- The Mystery of Declining Tooth Decay. Mark Diesendorf. *Nature.* 07/1986 322(6075):125-9.

"The available data, responsibly interpreted, indicate little or no beneficial effect of water fluoridation on oral health."  
*Dr. Kathleen Thiessen, 2006 National Research Council panelist (2011)*