



Questions Anyone Can Ask About:

Municipal Water Fluoridation Practice via Introduction of Hydrofluorosilicic Acid Into the Public Drinking Water System

Processing of phosphate fertilizer results in smoke stack emissions of silicofluorides and other co-contaminants, which are significant environmental pollutants. The US EPA and other governmental agencies require these pollutants be scrubbed from the industry's smoke stack emissions, to protect against environmental harm to flora and fauna. This unprocessed liquid scrubbing mixture, called hydrofluorosilicic acid, is sold to municipalities as the cheapest source of 'fluoride' to be added to otherwise clean drinking water.

The majority of hydrofluorosilicic acid used throughout North America comes from the State of Florida. It costs thousands of dollars per ton to properly and safely dispose of hydrofluorosilicic acid, which contains silicofluorides, plus trace co-contaminants such as lead, arsenic, mercury and radionuclides. Yet, industry is somehow able to sell it to municipalities as the primary means of 'fluoridating' drinking water throughout North America.

Dentists and dental associations believe that fluoridating municipal drinking water is safe and effective at reducing dental decay. Is this claim really true? After all, the hydrofluorosilicic acid 'fluoride' we are putting into our drinking water is not food grade, not dental grade and not pharmaceutical grade. It is not even the naturally occurring calcium fluoride we were all told about and sold on.

Hydrofluorosilicic acid has never been properly subjected to variable controlled scientific research pertaining to human consumption, human health, human safety, or even its effectiveness in fighting dental caries (cavities). We permit the industry producing this industrial toxic waste to largely police itself as it asserts hydrofluorosilicic acid is suitable to put into municipal drinking water. Why?

1: Why contaminate high quality drinking water with hydrofluorosilicic acid and its known co-contaminants when other abundant, higher grade sources of fluoride remain available through toothpaste, mouthwash, and dental-fluoride treatments, all of which we do not swallow?

2: As it is illegal to dump hydrofluorosilicic acid anywhere in our environment, how are we justifying dumping it into our drinking water supply?

Dr. J. William Hirzy (2000) Senior Chemist at the US EPA Headquarters states:
"If this stuff gets out into the air, it's a pollutant; if it gets into the river, it's a pollutant; if it gets into the lake, it's a pollutant; but if it goes right straight into your drinking water system, it's not a pollutant. That's amazing."

Rebecca Hamner (1983) Deputy Assistant Administrator For Water US EPA states:
"In regard to the use of fluosilicic acid as a source of fluoride for fluoridation, this agency regards such use as an ideal environmental solution to a long-standing problem. By recovering by-product fluosilicic acid from fertilizer manufacturing, water and air pollution are minimized."

3: Are we honestly interested in the health and well-being of our children when we take the cheapest industrial man-made toxic waste fluoride we can find, and dump it into our children's drinking water?

The Canadian Environmental Protection Act classifies hydrofluorosilicic acid as "persistent," "bio-accumulative" and "toxic."
Environment Canada classifies hydrofluorosilicic acid as a "hazardous substance."
Transport Canada classifies hydrofluorosilicic acid as a "dangerous good."
US Environmental Protection Agency classifies hydrofluorosilicic acid as "class one hazardous waste".

4: Since hydrofluorosilicic acid's inorganic fluoride, lead, arsenic, mercury and radionuclides pose a threat when diluted in the environment, how do they not pose a threat when diluted in our drinking water?

5: Given that science shows fluoride, lead, arsenic, and mercury are all toxic, persistent and bio-accumulative, why allow these toxins into our babies and children, when we know they build-up over a lifetime? We successfully safeguarded against mercury toxicity from dental amalgam fillings, why not safeguard against hydrofluorosilicic acid toxicity? When did lead, arsenic or mercury become healthy – in any amounts?

The Canadian Environmental Protection Act classifies hydrofluorosilicic acid as "persistent," "bio-accumulative" and "toxic." The Gosselin Clinical Toxicology Textbook (1983) referenced by medical doctors indicates: Lead is "very toxic", arsenic is "extremely toxic" and fluoride is "very to extremely toxic". Therefore, any argument made that arsenic and lead occur only in trace amounts, while fluoride comprises the bulk of the hydrofluorosilicic acid, would mean that we prefer to poison ourselves with 'fluoride' instead of arsenic and lead.

6: Does diluting a bio-accumulative toxin necessarily mean it will have no negative effect on you, or does it mean it will eventually have a negative effect on you?

7: Why do promoters of fluoridation rely on endorsements and endorsers to support their position, instead of showing us primary, double-blind, variable controlled science? What kind of arguments are name dropping and endorsements? Where's the science in that?

8: Why are we listening to Health Canada, Public Health, or the Dental Association(s), all heavy promoters of water fluoridation, when they hold no official responsibility or accountability for municipal water fluoridation practice, policy or chemical additives? Doesn't responsibility for what the municipality ultimately chooses to put into the drinking water rest squarely with the municipality?

9: Why, after more than 66 years, has hydrofluorosilicic acid yet to be scientifically proven safe and effective for a lifetime of human consumption, at any concentration in drinking water, across all ages and individual uniqueness? Where's the variable controlled science proving benefit of fluoridation in fluoridated versus non-fluoridated communities?

10: Where is the animal and human toxicological research that proves hydrofluorosilicic acid is safe, let alone effective? We conduct such research for any other product meant to be applied to or ingested by animals or humans – so why are we not doing it for hydrofluorosilicic acid? Are we the test subjects?

11: Could it be that after more than 66 years, promoters of water fluoridation simply don't want to look too closely because they might not like what the science shows (or doesn't show)? Not looking means never finding – why not promote, support and fund primary health and toxicological research on water fluoridation?

12: Don't water fluoridation promoters have the burden of proof to scientifically demonstrate hydrofluorosilicic acid/fluoridation is safe and effective? Should citizens have to prove that it is not safe and effective?

13: How much money have the various Dental Associations spent to date promoting and endorsing water fluoridation throughout? How much money do the various Dental Associations receive, either directly or indirectly from all sources, promoting and endorsing fluoride/fluoride containing products throughout? What might happen to reputations, and future endorsements, if water fluoridation is found not to be safe or effective? Do we need independent, arms length evaluation of the science here?

14: How can the public believe the pro-fluoridation reviews weighing the science, when the reviewers fail to disclose primary source science they reviewed and fail to cite scientific references for the rest of us to look up and verify? Why cite reviews, and reviews of reviews, yet not cite the actual primary scientific findings, author, publication, date, and page number?

15a: When suggesting 0.7 ppm (mg/L) fluoride in drinking water is 'optimal' and safe because this concentration may prevent excessive intake of fluoride through multiple sources of exposure (Health Canada's recent 2007-08 Panel Review) while the maximum allowable concentration (MAC) is set at 1.5 ppm (mg/L), doesn't that indicate a margin of safety of 2.14 (1.5 ÷ 0.7)? What do we do about infants, diabetics, renal patients, professional athletes, physical labourers, or soldiers who drink multiple times more water than the average person (2, 4, 6, 8, 10 times)?

15b: What happens when someone on fluoridated water is also given fluoride supplements, not realizing their water is fluoridated?

15c: Does this narrow margin of safety apply to the naturally occurring calcium fluoride we were told of and sold on, or the inorganic silicofluoride in hydrofluorosilicic acid that we ended up with, already known to be 20 – 25 times more toxic than calcium fluoride?

Simonin et al., "Toxicite brute des derives fluores," C.R. Seances Soc. Biol. Fil., 124:133-134, 1937
Waldbott, "Fluoridation: The Great Dilemma," Table 7-1, Coronado Press, Inc., 1978

16: Why tell-us-and-sell-us on naturally occurring 'calcium fluoride', and then put inorganic silicofluoride (hydrofluorosilicic acid) into our drinking water without telling us? Isn't that bait-and-switch? Where's the scientific proof that all fluorides are the same; that all fluorides fully dissociate back into free 'fluoride ions' upon contact with water? When did anyone vote for or agree to hydrofluorosilicic acid's lead, arsenic and mercury being added to municipal drinking water? Why do municipalities typically have only the equipment to measure dissociated fluoride ion concentration in drinking water, but no equipment to measure un-dissociated fluoride ion?

17: CFB Kingston said it is turning off fluoridation, "because there are other sources for the dental chemical". Why do Health Canada, Public Health and Dental Associations ignore this position from National Defence, yet rebuke the public or any municipality wishing to do the same thing? Canadian Forces are not waiting for feedback from any Provincial or Federal Fluoridation Office, so why should a municipality wait?

City of Kingston, Ontario, non-fluoridated for decades.
Only one booster station fluoridating water to CFB Kingston.
Department of National Defence gave approval to turn off the fluoride to CFB Kingston in May 2008.

18: The precautionary principle was used to move a provincial ban on cosmetic pesticides (Ontario); what's stopping us from doing the same for hydrofluorosilicic acid, something we drink/consume everyday?

19: Why, whenever fluoride is added to water and dental caries decline, fluoridation is heralded as the reason; but whenever water fluoridation ceases and dental caries holds or declines it must be due to other preventative measures?

20: What formal training do dentists have about the effects water fluoridation is having on our body organs and tissues, beyond the oral cavity? What formal training do dentists have concerning hydrofluorosilicic acid?

21: Why are we listening to dentists about systemic ingestion? Shouldn't we be seeking advice from leading chemists, toxicologists, neurologists, endocrinologists, epidemiologists, oncologists, pathologist, and so forth – who are shedding new medical light on the dangers of artificial water fluoridation, and the health harms these combined chemicals/toxins pose in our water?

22: Why does Health Canada send the National Dental Officer of Health, someone unqualified to comment on systemic ingestion and overall systemic health beyond the oral cavity, yet someone who offers such comment willingly, repeatedly and even categorically? Isn't that practicing medicine without a license and beyond medical scope?

23: Where are the cost calculations proving the claim a dollar spent on water fluoridation will save you any dollars in dental costs? Are we observing significantly reduced dental insurance claims in fluoridated versus non-fluoridated communities? Has Health Canada or the Dental Association(s) tracked these savings, or are they simply quoting and re-quoting unsubstantiated opinion? Since we only drink 1% to 2% of our municipally treated water, is fluoridation really to be seen as cost effective?

“A dollar spent on water fluoridation will save you \$38 in dental costs.”
Quoted By: Dr. Larry Levin (President - Ontario Dental Association – August 2008) CTV News Interview, CTV Newsnet
<http://watch.ctv.ca/news/latest/effects-of-fluoride/#clip72290>

24: Isn't it true that repairing cavities costs less, and therefore earns less, than dental cosmetic repairs like tooth whitening and enamel veneers? How much more do dentists earn performing cosmetic work instead of having to fill cavities? How much do dentists earn whitening and veneering teeth affected by dental fluorosis caused by swallowing too much fluoride/drinking fluoridated water?

25: Where are the municipal cost calculations to support the claim that in addition to the health benefits, fluoridation of municipal water reduces costs for existing dental programs run by the municipality, and reduces costs to the health care system? Where's the science and the math supporting this claim?

26: What scientific evidence has been referenced or provided, supporting a causal relationship between water fluoridation and reduction of dental caries? Why must there be a causal relationship found for fluoridation health harm, but not for fluoridation benefit? Is it reasonable to require causal evidence for harm but not benefit? Is this the 'weighing' of the scientific evidence we keep hearing about?

27: What up-to-date research is there which provides good evidence for the effectiveness of municipal water fluoridation? Is there scientific, statistically significant, variable controlled causal benefit of fluoridation found in these studies? How did these studies do a better job of controlling confounding variables such as age, socioeconomic status, race, culture, education, diet, nutrition, access to dental treatment, and alternative sources of fluoride – so as to ascribe principle benefit to water fluoridation alone and not other known variables?

28: What up-to-date scientific cause-and-effect research exists to show communities with naturally high calcium fluoride levels in their water will experience a lower rate of dental decay? Has anyone provided and validated such research?

29: What evidence has the municipality provided that fluoridating with hydrofluorosilicic acid poses no causal harm to the environment via discharge of wastewater and bio-solids? Does the municipality remove known hydrofluorosilicic acid contaminants from its sewage effluent or bio-solids? No.

30: When it is illegal to dump hydrofluorosilicic acid directly into the environment, how does a municipality justify dumping it into the environment via the drinking water system, where only 1% to 2% of this 'fluoridated' water is being consumed by people, and 98% of the hydrofluorosilicic acid ends up directly in the environment anyway?

31: What gives any municipality the morale, ethical or legal right to inflict admitted mild to moderate dental fluorosis on any person, due to its water fluoridation practice at the 'optimal' level? What is your municipal financial plan, should affected people pursue and achieve legal class action status and subsequent monetary award?

32: How will the municipality address the problem of known elevated blood lead levels due to accelerated lead leaching from leaded solder, leaded pipes and leaded brass fittings – caused by the highly corrosive hydrofluorosilicic acid put in the water distribution system at the suggested concentration?

Over the first test week with chlorine flushing alone, lead concentrations nearly doubled (from 100 ppb to nearly 200 ppb).
When (hydro)fluorosilicic acid was added to the water, lead concentrations spiked by a factor of nine.
Richard P. Maas et. al., "Effects of Fluoridation and Disinfection Agent Combinations On Lead Leaching From Leaded-Brass Parts"
NeuroToxicology 28 (2007) 1023–1031

To confirm and explain elevated blood lead levels and other disorders in children exposed to water disinfection and fluoridation chemicals.
Myron J. Coplan et. al., "Confirmation of and Explanations for Elevated Blood Lead and Other Disorders in Children Exposed to Water Disinfection and Fluoridation Chemicals", NeuroToxicology 28 (2007) 1032–1042

33: How does a municipality justify ignoring the Ontario Safe Drinking Water Act (2002) which stipulates you cannot add such contaminants into drinking water, and that dilution of contaminants is no defence, despite what the Ontario Fluoridation Act (1990) may have suggested in the past?

SEE: Ontario Safe Drinking Water Act (2002) Sections 20 & 166
Those outside of Ontario should review their own Act(s), Regulation(s) and/or Provincial/Territory Plan(s).

34: How will reducing a fluoride level to a lower concentration ppm (mg/L) in drinking water help in any sustainable way to reduce the rising environmental fluoride levels due to sewage effluent discharge? Don't fluoride levels simply continue to accumulate in these environmental waters, until they reach levels too high for safe consumption, at which time we must install costly water treatment fluoride-removal systems?

The Canadian Environmental Protection Act classifies hydrofluorosilicic acid as "persistent," "bio-accumulative" and "toxic."
ALSO SEE: Ontario Clean Water Act (2006)
Those outside of Ontario should review their own Act(s), Regulation(s) and/or Provincial/Territory Plan(s).

35: How does your municipal sewage plan accord with the Ontario Clean Water Act (2006) whereby conflict between any Act, Regulation, or Provincial Plan should follow the provision that provides the greatest protection to the quality and quantity of drinking water supplies? Since we only drink 1% to 2% of our municipally treated water, aren't we really dumping most of this hydrofluorosilicic acid into the environment anyway, through our water supply system?

SEE: Ontario Clean Water Act (2006)
Those outside of Ontario should review their own Act(s), Regulation(s) and/or Provincial/Territory Plan(s).

36: Where has the municipality provided any cost accounting to offer ongoing fluoride-free bottled water, or home distillation system, or home reverse osmosis system; to those persons or families paying for municipal drinking water, but unable to drink fluoridated water? Does the municipality only value equality and equity for certain identifiable groups, but not others? Is this not a breach of Canadian Charter of Rights and Freedoms (1982) equality rights protecting against such discrimination?

Canadian Charter Of Rights And Freedoms (1982) EQUALITY RIGHTS 15. (1)
"Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability."

37: Isn't the one-concentration-fits-all approach ('optimal' fluoridation level), a failure to value and control an individual's appropriate dose? Who controls for age, body mass, medical condition, lifestyle, or other individual uniqueness pertaining to amount of water consumed and ability to tolerate fluoride, lead, arsenic, mercury and radionuclides? Who even controls how much fluoridated water a person drinks?

38: How can dental fluorosis solely be blamed on fluoride in toothpaste and mouthwash, and not on municipally fluoridated water? How will the municipality track their imposed contribution to fluoride intoxication separate from fluoride intake from toothpaste and mouthwash? Will the municipality pay for its fare share of fluorosis or other resultant health harm damages?

39: Since we are unavoidably ingesting more fluoride today than ever before, from multiple sources like food, drink, mouthwash, toothpaste, dental products and environmental pollution – why do we still need to 'top-up' with fluoridated water? Will you show us how fluoride dose is actually calculated and being controlled under these circumstances? How much fluoride did you personally ingested today? If the 'experts' can't answer this question personally, how can they proclaim to know and control fluoride intake for everyone else?

"In 1997, the EPA estimated that Americans were ingesting nearly five times more fluoride than in 1971 – from food and drinks alone."
Smith G. 2001, Why Fluoride Is An Environmental Issue, Earth Island Institute, 22nd meeting of the ISFR, August 24-27

For further details, supporting facts, law, and science on municipal water fluoridation practice

you are invited to visit:

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