

Fluorosilicates Increase Blood Lead Levels

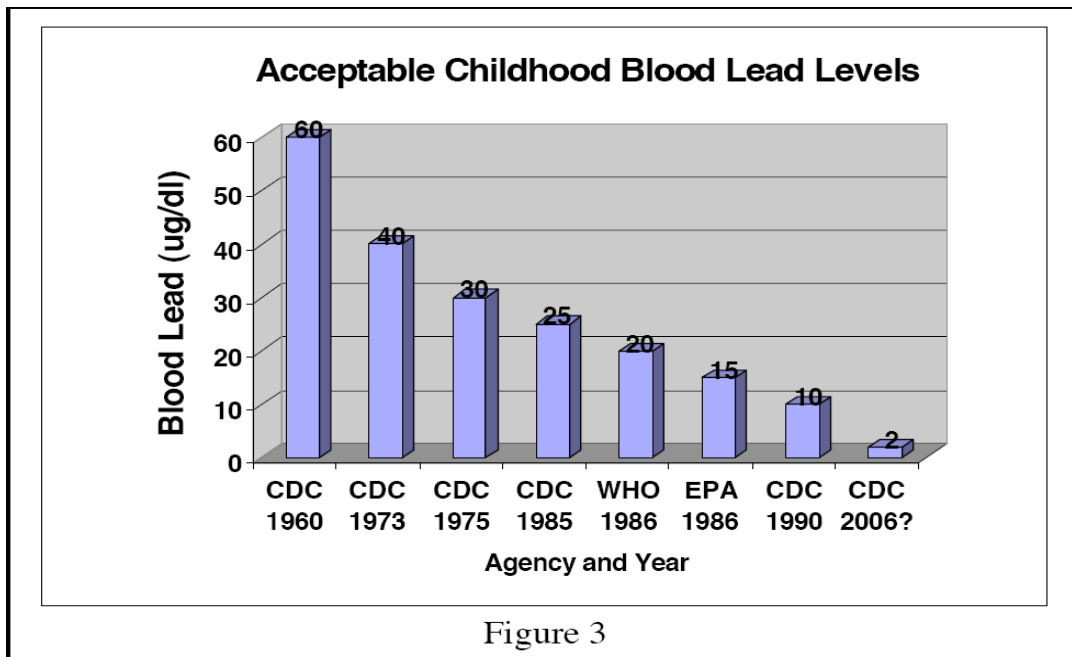
A growing body of research suggests that the practice of fluoridation may double the exposure of lead in our children from drinking water in two important ways:

1. **Direct additive:** Lead is the second most common contaminant found in the silicofluoride products used in most artificial water fluoridation facilities in the US.
2. **Indirect additive:** Lead is now known to leach from lead pipes, lead solder and leaded brass by mechanical and chemical interactions of fluorosilicates and/or chloramine.

Every tanker truck of fluorosilicates added to our drinking water contains up to 8 pounds of lead (permissible according to AWWA Standard B703-06).

Our definition of “safe dose” is evolving

Figure 3: Scientific Consensus Statement on Environmental Agents Associated with Neurodevelopmental Disorders, Feb, 2008



The following is a report regarding "Fluoridation impacts on Water Chemistry" from Thunder Bay, Ontario (BOH report, July 20, 2009)

"The effects on the water chemistry of three fluoridating agents, hydrofluorosilicic acid, sodium silicofluoride and sodium fluoride, were all tested on Bare Point drinking water in a laboratory controlled setting. The impact on the water chemistry with fluoride addition was tested to determine whether the addition of fluoride would have the potential to increase the number occurrences of elevated lead levels in the community.

The results of this preliminary study show that all fluoridating agents, when added to the drinking water at a concentration of 0.7ppm (the optimal fluoride concentration rate as recommended by an expert panel convened by Health Canada in 2007), increased lead leaching from the lead pipe."

CHLORAMINE & FLUOROSILICIC ACID & LEAD LEACHING FROM BRASS [Maas RP, Patch SC, Christian AM, Coplan MJ](#) 2007 Effects of fluoridation and disinfection agent combinations on lead leaching from leaded-brass parts.

From Table 3 (p. 1029):	Median Lead level
Chlorine	145.9µg/DL (1.5mg/L)
Chloramine *	23.3µg/DL (0.23mg/L) or 233ppb
Chlorine & sodium fluoride	185.3µg/DL (1.85mg/L)
Chloramine* & sodium fluoride	28.1µg/DL (0.28mg/L)
Chlorine and fluorosilicic acid	362.8µg/DL 3.63mg/L doubled
Chloramine* & fluorosilicic aci	42.6µg/DL(0.43mg/L) doubled
Chloramine** & fluorosilicic acid	83.1µg/DL(0.83mg/L) quadrupled

*with 100% extra ammonia added, to neutralize effect; **note** difference of one sample of chloramine without this extra ammonia (at **) ** without extra ammonia.

Silicofluoride use is associated with 2 neurotoxic effects [Coplan MJ, Patch SC, Masters RD, Bachman MS](#). 2007 Confirmation of and explanations for elevated blood lead and other disorders in children exposed to water disinfection and fluoridation chemicals.

1. Elevated blood lead levels in children (PbB>10µg/dL) is about double that in non-fluoridated communities
2. Silicofluorides inhibit an enzyme called acetylcholinesterase (AChE).