

# FLUORIDATION'S NEUROTOXICITY

There is **no question** that fluoride is neurotoxic, damaging the brain and central nervous system, as documented by hundreds of studies. Extensive scientific evidence, including studies at exposures caused by fluoridated water, show it can harm children. ***It can NOT be declared safe.***



2006: The National Research Council published Fluoride in Drinking Water<sup>1</sup>, the most authoritative review of fluoride's toxicity. It stated unequivocally that ***“fluorides have the ability to interfere with the functions of the brain and the body”*** and ***“the chief endocrine effects of fluoride include decreased thyroid function.”***

2012: A Harvard-funded meta-analysis<sup>2</sup> found that children ingesting higher levels of fluoride tested an average 7 IQ points lower in **26 out of 27 studies**. Most had higher fluoride concentrations than in U.S. water, but many had total exposures to fluoride no more than what millions of Americans receive.

***“Fluoride seems to fit in with lead, mercury, and other poisons that cause chemical brain drain.”***

**Philippe Grandjean, MD, PhD, Harvard study co-author, Danish National Board of Health consultant, co-editor of Environmental Health, author of over 500 scientific papers**

2015: A study<sup>3</sup> covering nearly all of England found that populations drinking fluoridated water had nearly twice as high prevalence of **hypothyroidism** (low thyroid level), **known to be linked to IQ deficits**. The study's authors concluded ***“there is substantial cause for public health concern.”***

2017: A petition to EPA<sup>4</sup> to end fluoridation found fluoride caused neurotoxic harm in **57 out of 61 human studies (mainly lowered IQ), several at levels in fluoridated water, and 112 out of 115 animal studies**. EPA denied the petition, triggering a lawsuit going to trial in federal court in 2019.

2017: A National Institutes of Health - funded longitudinal study<sup>5</sup> in Mexico covering 13 years, one of the most robust ever done, found that every one part per million increase in fluoride in pregnant women's urine – approximately the difference caused by ingestion of fluoridated water<sup>6</sup> - was associated with a reduction of their children's IQ by an average 5-6 points. Leonardo Trasande, a leading physician unaffiliated with the study, said it ***“raises serious concerns about fluoride supplementation in water.”***<sup>7</sup>

2018: A Canadian study<sup>8</sup> representing 6.9 million people found iodine-deficient adults (nearly 18% of the population) with higher fluoride levels had a greater risk of hypothyroidism. The study's lead scientist, Ashley Malin, said ***“I have grave concerns about the health effects of fluoride exposure.”***<sup>9</sup>



1. <https://www.nap.edu/catalog/11571/fluoride-in-drinking-water-a-scientific-review-of-epas-standards>
2. Choi et al <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3491930/>
3. Peckham et al <http://jech.bmj.com/content/69/7/619>
4. [http://fluoridealert.org/content/content-bulletin\\_3-1-18/](http://fluoridealert.org/content/content-bulletin_3-1-18/)
5. Bashash et al <https://ehp.niehs.nih.gov/ehp655/>
6. Till et al <https://ehp.niehs.nih.gov/doi/10.1289/EHP3546>
7. Newsweek, Sept. 19, 2017, <https://www.newsweek.com/childrens-iq-could-be-lowered-drinking-tap-water-while-pregnant-667660>
8. Malin et al <https://www.ncbi.nlm.nih.gov/pubmed/?term=till+malin+fluoride+thyroid>
9. Environmental Health News, Oct. 10, 2018, <https://www.ehn.org/we-add-it-to-drinking-water-for-our-teeth-but-is-fluoride-hurting-us-2611193177.html>