

June 17, 2025

MEMORANDUM FOR: Advisory Board of Health and Liz King, Health Officer
St. Clair County Health Department

FROM: Dr. Remington Nevin, Medical Director, St. Clair County Health Department

SUBJECT: Fluoride in St. Clair County Public Water Systems

As Medical Director of the St. Clair County Health Department, I am recommending to the Health Officer that the Department adopt proactive regulations, as described below, to prohibit the addition of fluoride and certain other additives to public water systems subject to its jurisdiction which provide water to residents of St. Clair County.

This action is being recommended consistent with the requirements of MCL 333.2433(1) that local health departments “diligently endeavor” to prevent and control “health problems of particularly vulnerable population groups”. Per MCL 333.2435 (d) local health departments may “[a]dopt regulations to properly safeguard the public health,” and per MCL 333.2441 may “adopt regulations necessary or appropriate to implement or carry out the duties or functions vested by law in the local health department.”

These recommendations are being made in my role as Medical Director per Michigan Administrative Code R 325.13001(d), “to provide direction [to the local governing entity] in the formulation of medical public health policy and program operation,” and in “advising the administrative health officer on matters related to medical specialty judgments.”

Fluoride is a plausible developmental neurotoxicant, excessive exposure to which, particularly during childhood, evidence now suggests carries a risk of neuropsychiatric adverse effects, including cognitive impairment.

Evidence continues to mount in the peer-reviewed literature of these effects, including in particularly vulnerable population groups. For example, a study published in 2017 found that prenatal fluoride exposure was associated with lower IQ in children ages six to twelve.ⁱ Likewise, a study published in 2019 found that higher maternal urinary fluoride in pregnancy was associated with reduced IQ in boys ages three to four.ⁱⁱ The fluoride exposure levels in these studies were comparable to those found in pregnant women in the United States.ⁱⁱⁱ



Elizabeth King, RN, BSN
Director/Health Officer

Greg Brown, BS
Administrator

Remington Nevin, MD, MPH, DrPH
Medical Director

On August 22, 2024, on the basis of review of these and other studies, the U.S. Department of Health and Human Services' National Toxicology Program (NTP) published a report concluding that the majority of the epidemiological studies pertaining to fluoride's impacts on children's IQ found an association between higher levels of fluoride exposure and reduced IQ in children. Specifically, the report concluded, "with moderate confidence, that higher estimated fluoride exposures (e.g., as in approximations of exposure such as drinking water fluoride concentrations that exceed the World Health Organization Guidelines for Drinking-water Quality of 1.5 mg/L of fluoride) are consistently associated with lower IQ in children." ^{iv}

While the report concluded there is currently insufficient data to determine if exposure to fluoride in water alone at 0.7 mg/L has a negative impact on children's IQ, the report also noted that "[a]dditional exposures to fluoride from other sources would increase total fluoride exposure," highlighting a concern that some pregnant women and children may be exposed to higher levels of fluoride due to exposure from multiple sources, including from treated public water, and from fluoride-containing toothpaste, floss, and mouthwash.

Following the NTP report's publication, on September 24, 2024, a U.S. District Court ruled, on the basis of this and other evidence, that public water system fluoridation at a level of 0.7 mg/L poses an unreasonable risk of injury to health under the Amended Toxic Substances Control Act (Amended TSCA),^v requiring that the U.S. EPA ultimately propose and develop regulations to address the identified unreasonable risk. This may involve the U.S. EPA drafting a regulation that could prohibit, restrict, or otherwise control the use of fluoride in public water systems, so as to mitigate the risk to health, including to particularly vulnerable populations groups. Options available to the U.S. EPA in this regard include banning the addition of fluoride to public water systems, limiting its use, or requiring labeling. As noted by the Court in its decision:

"This order does not dictate precisely what that response must be. Amended TSCA leaves that decision in the first instance to the EPA. One thing the EPA cannot do, however, in the face of this Court's finding, is to ignore that risk."

In response to the order, the U.S. EPA has committed to "expeditiously review new scientific information on potential health risks of fluoride in drinking water."^{vi} However, it remains unclear how quickly the EPA will propose and develop the required regulations,^{vii} a process which can take months to years to complete.

Pending this action, in recent months, several jurisdictions across the nation have taken proactive steps to protect their residents from the potential threats to public health posed by the continued addition of fluoride to public water systems. For example, the states of Florida^{viii} and Utah^{ix} have recently prohibited the addition of fluoride or certain other additives to public water systems. Across the Michigan Thumb, several townships have expressed a desire for similar measures, and within St. Clair County, I have received a number of resident concerns related to this issue, ultimately prompting this memorandum.

Consistent with these actions and to address local concerns, I am therefore recommending to the Health Officer that the St. Clair County Health Department adopt local health regulations that provide substantially as follows:

Recommendation (1): Define “water quality additive” as any chemical, additive, or substance that is used in a public water system for the purpose of: (a) meeting or surpassing primary or secondary drinking water standards; (b) preventing, reducing, or removing contaminants; or (c) improving water quality.

Recommendation (2): Prohibit the addition to any public water system, located in whole or in part within St. Clair County and providing water to residents of St. Clair County, of any form of fluoride or any other additive which does not meet the above definition of a “water quality additive.”

Adopting these regulations prior to future federal action on this issue would demonstrate a proactive concern for the health of our local population and its particularly vulnerable groups.

I will welcome the input of the Advisory Board of Health and of concerned residents in the further development and implementation of these recommendations.



Remington Nevin, MD, MPH, DrPH
Medical Director

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- ⁱ Bashash M, Thomas D, Hu H, et al. Prenatal Fluoride Exposure and Cognitive Outcomes in Children at 4 and 6–12 Years of Age in Mexico. *Environ. Health Perspect.* 2017;125(9):097017.
- ⁱⁱ Green R, Lanphear B, Hornung R, et al. Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada. *JAMA Pediatr.* 2019;173(10):940.
- ⁱⁱⁱ Malin AJ, Hu H, Martínez-Mier EA, et al. Urinary fluoride levels and metal co-exposures among pregnant women in Los Angeles, California. *Environ. Health.* 2023;22(1):74.
- ^{iv} National Toxicology Program. *NTP Monograph on the State of the Science Concerning Fluoride Exposure and Neurodevelopment and Cognition: A Systematic Review.* National Institute of Environmental Health Science. 2024.
- ^v U.S. District Court Northern District of California. Food & Water Watch, Inc., et al., v. U.S. EPA. Case No. 17-cv-02162-EMC. Findings of Fact and Conclusions of Law. September 24, 2024.
- ^{vi} U.S. Environmental Protection Agency. EPA Will Expediently Review New Science on Fluoride in Drinking Water US EPA. April 7, 2025. <https://www.epa.gov/newsreleases/epa-will-expeditiously-review-new-science-fluoride-drinking-water>.
- ^{vii} Duvall M. Federal Court Orders EPA to Regulate Fluoridation of Drinking Water under TSCA. *National Law Review.* October 19, 2024. <https://natlawreview.com/article/federal-court-orders-epa-regulate-fluoridation-drinking-water-under-tsca>.
- ^{viii} Payne K. Florida is poised to become 2nd state to ban fluoride from public water systems. *Associated Press.* April 29, 2025. <https://apnews.com/article/florida-fluoride-ban-public-water-systems-desantis-74821669626dc478db0aac6c22097f9b>.
- ^{ix} Brown M, Schoenbaum H. Utah bans fluoride in public drinking water. *Associated Press.* March 28, 2025. <https://apnews.com/article/utah-fluoride-ban-43f67153beb3e06ada9d782655fb15de>.