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Vision: To be the Healthiest State in the Nation

Guidance for Community Water Fluoridation November 22, 2024

Tallahassee, Fla. – State Surgeon General Dr. Joseph A. Ladapo recommends against community water fluoridation due to the neuropsychiatric risk associated with fluoride exposure.

Fluoride is a naturally occurring ion present in groundwater, fresh and salt water, rainwater, soil, plants, and foods. Community water <u>fluoridation</u> is the process of adjusting the amount of fluoride in drinking water to the level recommended to prevent tooth decay. Historically, community water fluoridation was considered to be a method to systemically, through ingestion, deliver fluoride to all community members. However, currently many municipalities across the U.S. and several European countries, including Austria, Belgium, France, Germany, Italy, Norway, and Sweden, have <u>eliminated water fluoridation</u>.

Today, fluoride is widely available from multiple sources, including topical fluorides, such as toothpaste, mouthwashes, and fluoride applications by dental providers. Evidence shows fluoride strengthens teeth, making them more decay resistant. However, additional research is being conducted to review the impacts of overall fluoride exposure in the population.

Several studies have reviewed fluoride exposure in vulnerable populations:

- A Mexico City, Mexico, study published in 2017 found that prenatal fluoride exposure was associated with <u>lower IQ</u> in both boys and girls ages six to twelve. Similarly, a nationwide Canadian study found that higher maternal urinary fluoride in pregnancy was associated with <u>reduced IQ</u> in boys ages three to four. The fluoride exposure levels in these studies are <u>comparable</u> to those found in pregnant women in the United States.
- A Canadian cross-sectional study published in 2019 found an association between exposure to fluoridated water and <u>attention deficit hyperactivity disorder (ADHD)</u> among children and adolescents between the ages of six and seventeen.
- Similarly, higher prenatal fluoride exposure was associated with increased incidence <u>of ADHD</u> in children ages six through twelve in a subgroup of the Mexico City, Mexico study.
- A 2023 Canadian study found that maternal exposure to fluoridated drinking water at 0.7 milligrams per liter throughout pregnancy was associated with <u>decreased child inhibitory control</u> <u>and cognitive flexibility</u>, particularly in girls.
- Another study published in JAMA Network Open in May 2024, found higher <u>prenatal fluoride</u> <u>exposure</u> was associated with increased child neurobehavioral problems in Los Angeles, California. The authors recommended establishing guidelines for limiting fluoride exposure during pregnancy.
- On August 22, 2024, the U.S. Department of Health and Human Services National Toxicology Program (NTP) published a <u>report</u> evaluating total fluoride exposure from all sources.



- The report highlights a concern that some pregnant women and children may be receiving more fluoride than necessary due to fluoride exposure from multiple sources, including treated public water, water-added foods and beverages, teas, toothpaste, floss, and mouthwash. Thus, the combined total intake of fluoride may exceed safe amounts.
- The report states that the majority of the 72 epidemiological studies pertaining to fluoride's impacts on children's IQ, published through April 2021, found an association between higher levels of fluoride consumption and reduced IQ in children.
- While there is insufficient data to determine if the lower level of 0.7 milligrams per liter, currently recommended for U.S. community water systems, has a negative impact on children's IQ, the report concludes that there is moderate confidence in the scientific evidence that points to an association between higher levels of fluoride consumption and lower IQ in children.¹
- On September 24, 2024, <u>a U.S. District Court ruled</u> that community water fluoridation at 0.7 milligrams per liter presents an unreasonable risk of injury to health under the <u>Amended Toxic</u> <u>Substances Control Act (Amended TSCA)</u> and the U.S. Environmental Protection Agency is obliged to take regulatory action in response.

Other studies point to various potential impacts associated with systemic fluoride consumption that should be considered when weighing the risks and benefits of adding fluoride to community water systems, including increased risks of developing <u>sleep apnea</u>, accumulation of fluoride in the pineal gland, <u>sleep cycle disturbance</u>, <u>premature menarche</u> in adolescent girls, negative impacts on the <u>thyroid gland</u>, and elevated occurrences of <u>skeletal fluorosis</u>.

Due to the neuropsychiatric risk associated with fluoride exposure, particularly in pregnant women and children, and the wide availability of alternative sources of fluoride for dental health, the State Surgeon General recommends against community water fluoridation.

The Florida Department of Health strongly supports oral and overall health through:

- Operation and expansion of school-based preventive dental services.
- County health department dental clinics, which provide dental services to communities.
- Screening and treatment referral in pre-school and school settings.
- Provider education, including training on oral health service delivery for those with special health care needs.
- Promotion of healthy habits, with emphasis on a reduction in sugar consumption, through oral health education to communities.
- Providing oral health care supplies to community partners.
- Providing tobacco and vaping cessation resources and services.

Based on self-reported data from 2023, it is estimated that more than 70% of Floridians on community water systems receive fluoridated water. To see if your community water system is included, please visit the webpage <u>Public Water Systems Actively Fluoridating</u>.

References

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- 4. <u>Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring</u> in Canada - PubMed
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- 6. <u>Association of water fluoride and urinary fluoride concentrations with attention deficit</u> <u>hyperactivity disorder in Canadian youth - PubMed</u>
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- 9. <u>Maternal Urinary Fluoride and Child Neurobehavior at Age 36 Months | Public Health | JAMA Network Open | JAMA Network</u>
- 10. <u>NTP Monograph: State of the Science Concerning Fluoride Exposure and Neurodevelopment</u> and Cognition: A Systematic Review; August 2024
- 11. Food & Water Watch, Inc., et al. v. Environmental Protection Agency, et al. | United States Courts
- 12. COMPS-895.pdf
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