



American Association
for Dental Research

November 30, 2015

Dr. Lori White
Office of Liaison Policy and Review
Division of NTP
NIEHS
P.O. Box 12233 K2-03
Research Triangle Park, NC 27709

Dear Dr. White:

On behalf of the 3,700 individual and 60 institutional members of the American Association for Dental Research (AADR), we are writing in response to the National Institutes of Health notice: "National Toxicology Program Board of Scientific Counselors; Announcement of Meeting; Request for Comments".ⁱ We are submitting comments on the NTP proposed systematic review on fluoride and developmental toxicity. Community water fluoridation is one of the great public health achievements of the 20th century, preventing at least 25 percent of tooth decay in children and adults even with the widespread availability of fluoride from other sources.

As you know, the Department of Health and Human Services (HHS) updated their recommendation for a single level of 0.7 milligrams of fluoride per liter of water in April 2015 because Americans now have access to more sources of fluoride. HHS also recognized the need for community water fluoridation to continue because it reduces tooth decay in children and adults beyond that provided by using only toothpaste and other fluoride-containing products.ⁱⁱ

AADR also recognizes that community water fluoridation continues to be the most effective and least expensive measure to prevent dental caries or tooth decay at the community level and that fluoride toothpaste use is the most effective method to control dental caries at the individual level. Moreover, there is evidence supporting the safety and efficacy of dietary fluoride supplements, when correctly used.

As the NTP considers whether to conduct a systematic review on fluoride and developmental neurotoxicity, it would be a great benefit to the public if NTP focuses on the therapeutic range of water fluoridation up to limits set by the Environmental Protection Agency.

There have been several recent reviews of the safety and efficacy of water fluoridation compiled by authoritative bodies, including;

- Fluoride in Drinking Water: A Scientific Review of EPA's Standards, Committee on Fluoride in Drinking Water, National Research Council, ISBN: 978-0-309-10128-8.
<http://www.nap.edu/catalog/11571.html>
- Medical Research Council working group report (U.K.): Water fluoridation and health. September 2002. <http://www.mrc.ac.uk/publications/browse/water-fluoridation-and-health>

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- The European Scientific Committee on Health and Environmental Risks (SCHER) provided a “Critical review of any new evidence on the hazard profile, health effects, and human exposure to fluoride and the fluoridating agents of drinking water” (2011). http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_139.pdf
- The Irish Department of Health: Health Effects of Water Fluoridation: An evidence review (2015). <http://www.hrb.ie/publications/hrb-publication/publications//674/>
- Water Research Foundation’s report on the State of the Science: Community Water Fluoridation (2015) <http://www.waterrf.org/PublicReportLibrary/4641.pdf>
- U.S. Department of Health and Human Services Federal Panel on Community Water Fluoridation. U.S. Public Health Service Recommendation for Fluoride Concentration in Drinking Water for the Prevention of Dental Caries. Public Health Rep. 2015 Jul-Aug; 130(4):318-31. http://www.publichealthreports.org/documents/PHS_2015_Fluoride_Guidelines.pdf

The U.S. Department of Health and Human Services Federal Panel on Community Water Fluoridation, citing the SCHER review concludes:

A review by SCHER also considered the neurotoxicity of fluoride in water and determined that there was not enough evidence from well-controlled studies to conclude if fluoride in drinking water at concentrations used for community fluoridation might impair the IQ of children. The review also noted that “a biological plausibility for the link between fluoridated water and IQ has not been established.”

AADR believes these authoritative reviews confirm the safety and efficacy of water fluoridation to improve population oral health and clearly demonstrate that the best available science-based evidence does not establish a causal relationship between lowered intelligence (IQ) in children, behavioral disorders, or central nervous system disorders and consumption of water fluoridated at recommended levels and use of fluoride dental products. They fail to find any evidence of neurotoxic effects of fluoride to humans at levels consistent with community water fluoridation. Further, it was noted that, due to the overall low quality of the many studies in areas with high levels of naturally occurring fluoride, it is difficult to draw conclusions about the relationship between drinking water fluoride levels and IQ or the level of neurological effects.

In order to do a quality systematic review on the neurotoxicity of fluoride at therapeutic levels, there needs to be a sufficient number of high-quality studies to include, which the AADR does not believe exists. Thus, we hope the National Toxicology Program will affirm the safety and effectiveness of fluoride and acknowledge the longstanding and significant role fluoride has played in improving the oral health of Americans for seven decades.

Sincerely,

[Redacted]

[Redacted]

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ⁱ Federal Register Vol. 80 No. 198, p. 61831-2 October 14, 2015. Accessed at <https://federalregister.gov/a/2015-26051>

ⁱⁱ <http://www.hhs.gov/about/news/2015/04/27/hhs-issues-final-recommendation-for-community-water-fluoridation.html>