

October 14, 2024

## Statement on Community Water Fluoridation

The Colorado Department of Public Health and Environment (CDPHE) recommends that public water systems maintain fluoride levels in drinking water at 0.7 milligrams per liter (0.7 mg/L) to protect against tooth decay.

Cavities are the <u>leading chronic disease among children and adults</u> in the United States, far surpassing the rates of asthma, diabetes, and hypertension. Recent findings from CDPHE indicate that more than 60% of Colorado's third graders have experienced tooth decay, with about half of these children having not received dental treatment. Poor oral health in children contributes to lower school performance, more missed school days, behavior problems resulting from untreated oral pain, and preventable oral health care spending for families and Colorado taxpayers.

Fluoride is a naturally occurring mineral found in nearly all water sources. Similar to other health-promoting nutrients in foods such as calcium added to milk to protect bones, folate added to orange juice to prevent birth defects, and iodine added to salt to protect thyroid function, fluoride added to water protects teeth.

Since 1945, community water fluoridation has been studied hundreds of times by many reputable scientific organizations for its safety and efficacy in preventing tooth decay. The overwhelming findings of these studies indicate that fluoride, at the <u>Centers for Disease Control and Prevention (CDC)</u> recommended level in drinking water, reduces tooth decay by more than 25%, irrespective of other oral health-protective factors such as brushing, flossing, or visits to the dentist, without posing risks to health or safety.

Additionally, fluoridation is a cost-effective public health measure, saving \$61 in oral health care costs for every dollar invested in drinking water fortification with fluoride. In fact, each fluoridated water consumer can benefit from a lifetime of protection from oral disease for less than the cost of a single dental filling.

In contrast to well-established scientific evidence, <u>on September 25, 2024, the United States District</u> <u>Court. District of Northern California ruled</u> that community water fluoridation at optimal levels poses an unreasonable risk to public health under the Toxic Substances Control Act (TSCA). In its opinion, the Court cited the National Toxicology Program's report titled "<u>Fluoride Exposure: Neurodevelopment and</u> <u>Cognition</u>", released on August 25, 2024, as the basis for its opinion.

The National Toxicology Program report was conducted as an analysis of data from multiple independent studies examining fluoride exposures well above recommended levels in drinking water, often derived from research conducted outside of regulated U.S. water systems. The National Toxicology Program report explicitly stated that "there were insufficient data to determine if the low fluoride level of 0.7 mg/L currently recommended for U.S. community water supplies has a negative effect on children's IQ."

Furthermore, the <u>National Academies of Sciences, Engineering and Medicine reviewed a pre-release draft</u> of the National Toxicology Program report in 2021 where the report's authors were advised to clarify that its conclusions do not apply to recommended fluoride levels in drinking water. The Academies review stated that "much of the evidence presented comes from studies that involve relatively high fluoride concentrations and that the monograph cannot be used to draw conclusions regarding low fluoride exposure concentrations (less than 1.5 mg/L), including those typically associated with drinking water fluoridation."



The District Court's opinion did not reference the National Toxicology Program report's admonition against applying its findings to public policy regarding the recommended level of fluoride in drinking water nor did the opinion cite compelling new evidence to support changes to the current public health recommendation regarding fluoride in drinking water.

Because of these circumstances surrounding this ruling, the department's recommendation for a drinking water fluoridation level at 0.7 mg/L is not changed. The department's standing recommendation aligns with the positions of the U.S. Surgeon General, the Centers for Disease Control and Prevention, the American Public Health Association, the American Medical Association, the American Association of Public Health Dentistry, the National Institute of Dental & Craniofacial Research, and the World Health Organization, among numerous other highly regarded organizations.

Additionally, following the announcement of the Court's opinion, the <u>American Water Works Association</u>, the <u>American Dental Association</u>, the <u>American Academy of Pediatrics</u> and the <u>American Fluoridation</u> <u>Society</u> have each reaffirmed support for optimal community water fluoridation as safe, effective, and essential to the protection of the public's health.

CDPHE seeks to align its public health recommendations with the latest scientific research. The facts of this Court ruling are not sufficient cause to revise the department's long-standing recommendation to adjust fluoride levels in finished drinking water to 0.7 mg/L. The department will continue to review new and emerging research on community water fluoridation and will revise its recommendations only when supported by the weight of scientific evidence.

The state Dental Director and the Oral Health Unit are able to respond to further inquiries regarding community water fluoridation and this Court ruling at <u>cdphe.psfluoridationsmf@state.co.us</u>.

Thank you for your partnership in protecting the public's health.

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