

## Purpose

Evaluate parents' and caregivers' knowledge, opinions, and concerns regarding community water fluoridation and its impact on dental health in the context of Utah's legislation removing fluoride from public drinking water.

## Background

Community water fluoridation (CWF) is defined as "the process of adjusting the fluoride in community water supplies to optimal concentration for preventing caries" (AAPD, 2023). The American Academy of Pediatric Dentistry reports that water maintained at optimal fluoride levels (0.7 ppm) is associated with a 35% reduction in decayed, missing, or filled primary teeth and a 26% reduction in permanent teeth, making CWF a fundamental component of pediatric preventive care. The CDC has recognized water fluoridation as one of the ten great public health achievements of the 20th century.

Despite this evidence, Utah recently passed House Bill 8, banning CWF, stating that "a person may not add fluoride to water in, or water that will be introduced into, a public water system" (Utah State Legislature, 2025). Following Calgary's cessation of fluoridation in 2011, caries prevalence increased significantly among Grade 2 schoolchildren compared to peers in Edmonton, which maintained CWF (McLaren et al., 2021), suggesting that removing CWF can have measurable consequences on pediatric oral health.

Given this policy shift in the State of Utah, understanding the knowledge and attitudes of the public toward CWF is important. This study seeks to assess public opinion on CWF among patients at Utah pediatric dental clinics and evaluate whether government policy aligns with community values. Findings may identify opportunities for clinical education efforts and anticipatory guidance, while also reflecting whether public sentiment supports or conflicts with the state's decision to ban CWF.

## Methods

Participants included parents and guardians of current pediatric dental patients presenting for appointments at three Utah clinics: Primary Children's Hospital Dental Clinic (SLC), and two private practices in Saratoga Springs and the greater Salt Lake City area. At the start of each appointment, before the treating clinician entered, dental assistants approached eligible participants and invited them to take part. The survey was offered to English and Spanish-speaking participants and was available in both languages. Following informed consent, participants completed a paper survey in the clinic and returned it prior to leaving the appointment.

The 13-question multiple-choice survey assessed participant knowledge of, and attitudes toward CWF. Questions addressed fluoride use at home, awareness of Utah's legislative ban on CWF, opinions on government authority over public water fluoridation, trusted sources of fluoride information, and reasons for supporting or opposing supplemental fluoride in community water. Demographic information including age, education level, and political affiliation, was also collected. A total of 298 surveys were collected across the three sites. Data was analyzed to evaluate public understanding of CWF and to examine whether community opinion aligns with current Utah state policy.

## Results

Of the 298 participants who completed the survey, Approximately half were fully aware of the Utah legislative bill banning CWF. The remainder were either unaware or did not fully understand the new bill. Opinions on government control of community water fluoridation were nearly evenly divided — 36% opposed, 30% in favor, and 33% unsure. Notably, 69% of those opposed to government-controlled CWF still supported in-office fluoride at dental visits, suggesting opposition to CWF does not reflect a broader rejection of fluoride.

Most participants trusted their dental provider above all other sources when learning about fluoride, far exceeding trust in internet searches or social media. Political affiliation showed a significant relationship with views on CWF ( $p = 0.003$ ), with Republicans more likely to favor individual decision-making and Democrats more commonly supporting government control. Those supporting CWF also had significantly higher education levels than both opposing groups ( $p < 0.001$ ).

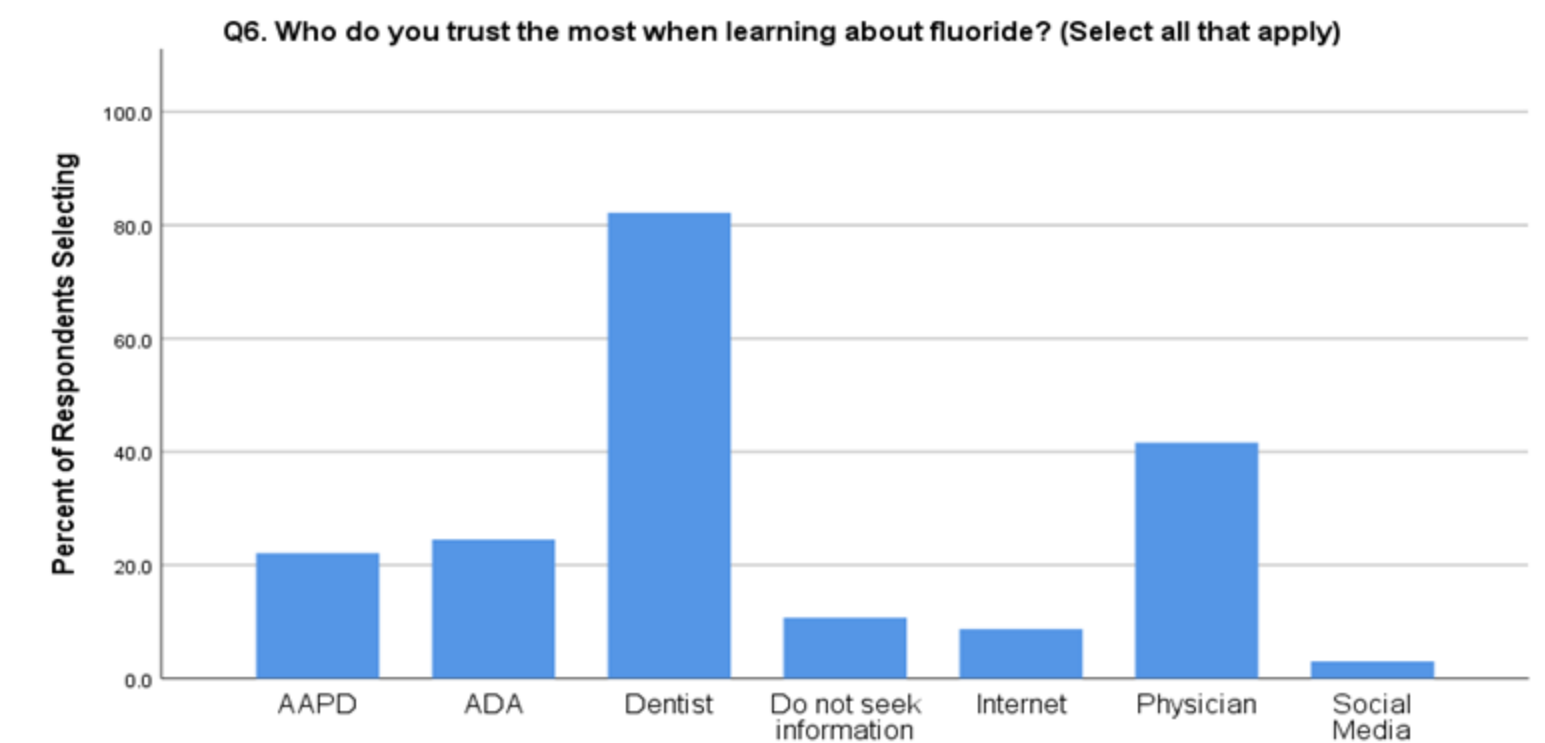
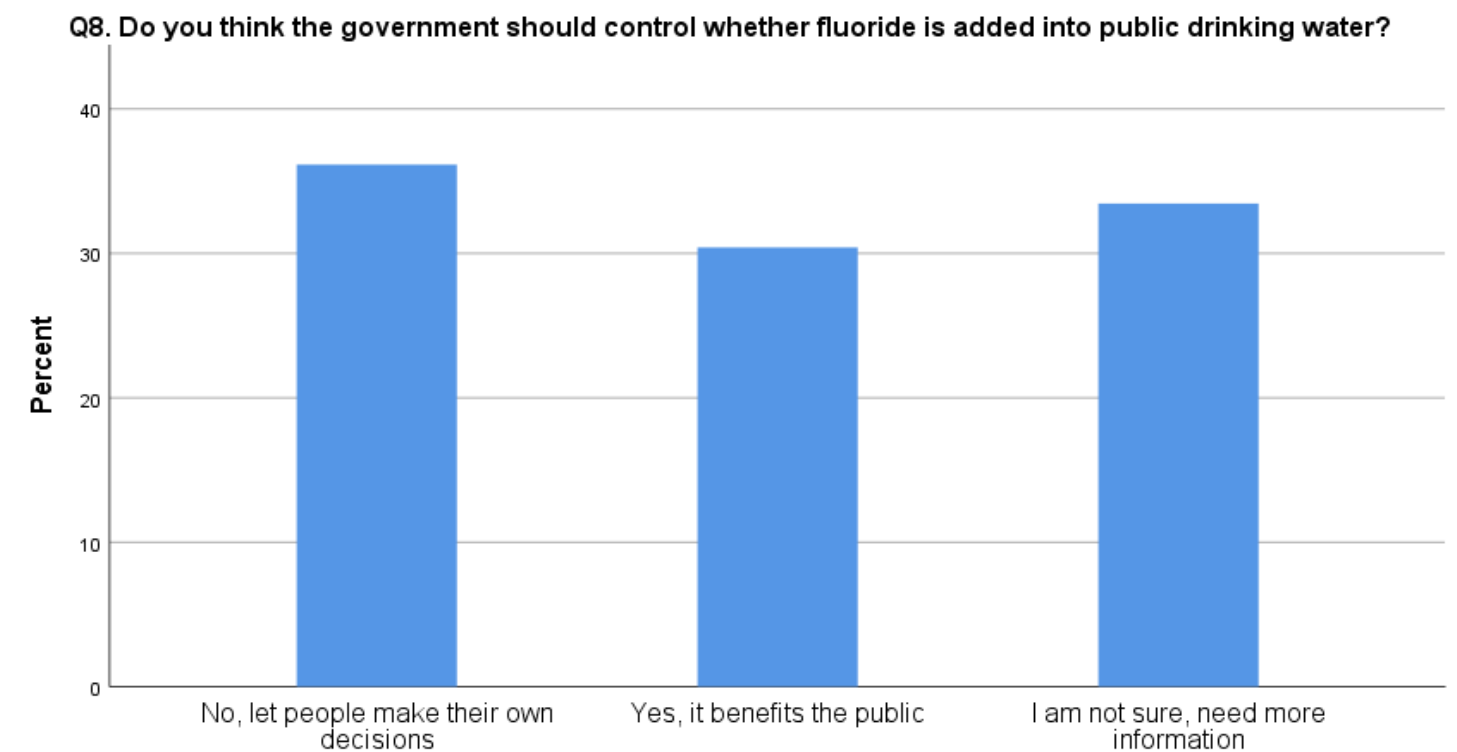
Among those with concerns about CWF, child safety was the most commonly cited reason, followed by lack of informed consent. The majority of respondents, however, reported having no concerns, and 59% cited cavity prevention as their primary reason for supporting CWF.

## Conclusions

Despite nearly even division on government control of CWF, the majority of respondents supported in-office fluoride use and most reported no concerns about fluoride itself. This may suggest that opposition to CWF reflects concerns about government authority over personal health decisions rather than a fundamental rejection of fluoride. This distinction is critical for pediatric dentistry, indicating an opportunity to reframe conversations around CWF by separating the science of fluoride from the politics of its delivery.

Political affiliation and education level were significantly associated with views on CWF, while location and language were not. Dentists remained the most trusted source of fluoride information across all groups, yet no single trusted information source was significantly associated with CWF support. Among those with concerns, child safety and lack of informed consent were most commonly cited, both are areas where pediatric dentists are uniquely positioned to provide evidence-based counseling and address misconceptions directly. A longitudinal study is needed to evaluate how CWF removal impacts caries rates among underserved populations and to examine how provider-led counseling can shape parental attitudes over time and counter the growing influence of misinformation online.

No conflicts of interest to disclose.



## References

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