

# The FLUID Database's Impact

*Informing Discussions and Deliberations  
About Community Water Fluoridation*



**March 2015**

## Introduction

Community water fluoridation is a 70-year-old public health practice whose ability to safely reduce tooth decay has been recognized by leading health and medical organizations, including the Centers for Disease Control and Prevention (CDC), the American Dental Association, the American Academy of Pediatrics and the Institute of Medicine.<sup>1</sup> Despite the strong scientific consensus supporting fluoridation's safety and effectiveness, it remains the subject of intense debate and discussion in various U.S. communities.

Until several years ago, there was no single website which health officials or lay persons could use to find or compare state laws, local ordinances and legal decisions regarding community water fluoridation. That changed in February 2011 when the Children's Dental Health Project (CDHP)—with financial support from the CDC—launched the Fluoride Legislative User Information Database (FLUID).<sup>2</sup>

FLUID ([fluidlaw.org](http://fluidlaw.org)) is a comprehensive, online database of state legislation, regulatory codes, local ordinances and court decisions involving community water fluoridation in the 50 U.S. states and territories. The website was launched to provide policymakers with accurate information to assist them in making thoughtful decisions about fluoridation.

FLUID is maintained with assistance from the Health Law and Policy Program on Law and Government at the American University's Washington College of Law. Law students research Westlaw and other legal, online search engines for any new legislation or recently decided legal cases, which are then uploaded to FLUID.

Although state laws, local ordinances and court decisions predominate on the website, FLUID also includes relevant federal regulatory or administrative language. For example, the database posted the Environmental Protection Agency's decision in August 2013 to reject a petition that sought to ban the most common form of fluoride used by communities for the fluoridation process.

In 2014, FLUID underwent technical upgrades and a redesign that included a sidebar for highlighting significant laws or legal decisions. The home page text was also revised, and the windows and instructions for conducting searches were simplified.

Although CDHP, the CDC and other public health stakeholders have worked to raise awareness of FLUID's presence, the site's traffic is generated mostly through organic searches. FLUID appears as a search result because of its relevance to the search terms used in Google, Bing or another online search engine.

*\*This policy brief is solely authored by the Children's Dental Health Project and does not necessarily represent the official position of the Centers for Disease Control and Prevention.*

Over the past two years, the average number of monthly visits to FLUID has been nearly 4,800. The average length per site visit over this period is 3 minutes and 50 seconds. Quarterly web analytics for FLUID are available in Appendix A.

## Impact Stories

### 1. **New York: Identifying Model Legislation**

In 2013, a diverse coalition of policy organizations, foundations and other stakeholders in New York State began assessing the best and most cost-effective strategies for preventing Early Childhood Caries (ECC)—tooth decay among children under age 6. This analysis, using a simulation model, revealed that community water fluoridation was one of the most cost-effective approaches for reducing tooth decay among young children.

Based on this assessment, the Schuyler Center for Analysis and Advocacy, a leading coalition partner, released a report in January 2015 called *The Power of Prevention*. The report urged New York officials to consider several policy options for improving children’s oral health.

One recommendation was to increase transparency by requiring local officials to provide ample notice to residents before taking a final vote on whether to cease fluoridation.<sup>3</sup> This recommendation was modeled after a Tennessee law that the New York coalition became familiar with through a FLUID search.

“Finding out about the Tennessee law was very helpful,” explained Bridget Walsh, a senior policy associate at the Schuyler Center. “By giving us that example, FLUID showed us how another state had addressed this issue. Our goal is to ensure that in the end, whatever a community decides to do, it gives its health professionals and parents sufficient time to weigh in and share any concerns they have.”

The proposal for strengthening public disclosure of plans to end fluoridation was incorporated in Governor Cuomo’s executive budget proposal. The New York State Legislature has yet to take final action on this proposal.

### 2. **Connecticut: Gaining Perspective**

Once the U.S. Department of Health and Human Services (HHS) finalizes its recommendation for the fluoride concentration used for water fluoridation, Connecticut would need to amend its statute to align with the anticipated change. The state’s 1965 law requires local water systems to maintain a minimum fluoride concentration of 0.8 milligrams per liter (mg/L).<sup>4</sup> Many observers expect HHS to finalize its preliminary decision to recommend a level of 0.7 mg/L.

Months before the 2015 legislative session began, state health officials met to discuss the appropriate timing for seeking a revision in Connecticut’s fluoridation statute. Soon before this meeting, CDHP released a CDC-funded policy brief, identifying the 13 states that specify fluoride concentrations by a statute or regulation. The brief was based on a comprehensive review of the FLUID database.

After reading this brief and discussing it at length, Connecticut health officials decided not to invite or encourage a proposal to amend its statute this year.

“It was great to have that policy brief available,” explained Linda Ferraro, state oral health director. “We realized after reading the brief that we’re not the only state in this boat. It gave us a good, broader perspective. We don’t feel the need to rush into changing the statute.”<sup>5</sup>

### 3. **Florida: Learning From Other States**

In 2014, Oral Health Florida—a nonprofit statewide coalition seeking to improve oral

health outcomes—created a Fluoridation Action Team. The team’s major objectives are to monitor local decisions in Florida on fluoridation, train more dental professionals to serve as public spokespersons on the issue, and explore and encourage legislative proposals to facilitate fluoridation.

“Our team has been exploring a variety of options for state legislative proposals that could facilitate community water fluoridation in one or more ways,” said Johnny Johnson, a dentist who co-chairs the Fluoridation Action Team. “These options include funding mechanisms and public disclosure laws.”

“Having access to the FLUID website has enabled us to examine existing laws in other states and see whether any of this language could serve as a model for advancing oral health in Florida,” said Johnson.

#### **4. A Trusted Source: Informing Legal, Professional and Scholarly Content**

A website’s impact is often reflected by the variety of respected health stakeholders, state agencies, civic organizations and others that promote it or cite in in their reports, articles, white papers or web content.

The oral health-related web pages of various state health agencies promote FLUID as a resource. These agencies include the Alaska Department of Health and Social Services, the Indiana State Department of Health, and the Montana Department of Public Health and Human Services.<sup>6</sup> The Rural Assistance Center—an initiative of the U.S. Department of Health and Human Services’ Rural Initiative—promotes FLUID as one of six resources for web visitors.<sup>7</sup>

When the city of Valparaiso, Ind. decided in 2014 to consider whether to continue water fluoridation, the city established a study commission that cited FLUID as one of the resources it considered or reviewed.<sup>8</sup>

In the oral health field, the American Dental Association (ADA) has promoted FLUID in press materials and through a column that appeared in a publication for ADA members—explaining that the database is “accumulating legal and legislative data” about fluoridation.<sup>9</sup> The Pennsylvania chapter of the American Dental Hygienists’ Association includes FLUID as one of its national web-based resources.<sup>10</sup> The journal *Dimensions of Dental Hygiene* announced the creation of FLUID.<sup>11</sup>

On their blogs or dental practice websites, several dentists have promoted FLUID or cited it as a resource, including a dentist from rural Virginia who sought to demonstrate that fluoridation has consistently been backed as a constitutionally upheld practice.<sup>12</sup>

The Texas Oral Health Coalition cited FLUID as a source on a website that the coalition created to focus on fluoridation.<sup>13</sup> The coalition’s executive director, Beth Stewart, said that FLUID fills an important niche on the web. “With so much misinformation on the Internet, health providers, policy makers and consumers need to have an accurate resource that offers current local, state and federal actions on policies concerning community water fluoridation,” she said.

Stewart added that she appreciates the fact that FLUID posts updates on new regulatory guidance or decisions that federal agencies make related to fluoridation.<sup>14</sup>

Health and medical organizations outside of the oral health field have also recognized FLUID’s value as a resource. The American Academy of Pediatrics posts a link to FLUID on one of its oral health-focused web pages, and the Iowa Public Health Association posts a link to FLUID on its website.<sup>15</sup> The Berks County (Penn.) Medical Society cited it as a resource for its members in an article published in its quarterly journal.<sup>16</sup>

The Association of Maternal and Child Health Programs (AMCHP) cited FLUID as a resource in

a 2013 document that cited community water fluoridation as one of 63 “life course indicators” that measure progress in ensuring maternal and child health.<sup>17</sup>

Some civic and professional organizations have also used FLUID to better understand fluoridation laws and governing legal decisions for their states or communities. For example, the Cincinnati chapter of the League of Women Voters cited FLUID in a white paper it prepared on water use and conservation.<sup>18</sup>

Legal professionals have also recognized FLUID as a helpful resource. In 2013, a journal article in *American University’s Health Law & Policy Brief* relied on the database to explore the significant case law and legislation surrounding fluoridation.<sup>19</sup>

### **5. Online: Encouraging a Fact-Based Dialogue**

The web is becoming a more popular venue for Americans to seek or share information about public health issues. Since FLUID was launched, both advocates and opponents have prompted or cited the database and its content—a fact that attests to the site’s nonpartisan, legal-focused purpose.

FLUID has been cited numerous times as a source by readers posting comments to blogs or online newspaper articles. For example, one commenter cited FLUID and shared its link, noting that opponents of community water fluoridation “have never won any significant (court) cases” in the U.S.<sup>20</sup> FLUID is promoted by Dental Watch, a website co-managed by a physician and two dentists that identifies oral health positions or products that are not evidence-based.<sup>21</sup>

Chuck Haynie, a retired Oregon physician who monitors news stories about fluoridation, called FLUID “a very good reference for comments. It is

always my first stop when some new legal question comes up regarding this issue.”<sup>22</sup>

Critics of fluoridation have also seen FLUID as a resource. Anti-fluoride groups based in Kansas, Maine, Massachusetts and New York have shared links to FLUID or summarized its purpose. For example, a blog for the group Clean Water Maine posted the web address for FLUID as the site to learn more about the state’s law pertaining to local fluoridation programs.<sup>23</sup> Fluoride Free Kansas has posted language from FLUID’s home page on its website.<sup>24</sup>

## **Conclusion**

FLUID’s reputation and gravitas is demonstrated by the degree to which it is used, cited and promoted by a variety of key organizations and institutions, including health agencies, civic organizations, oral health stakeholders, professional societies, and nonprofits.

Since community water fluoridation was first initiated in Grand Rapids, Mich., it has been the subject of intense discussion within the United States. Although the lines of debate have shifted somewhat over time, the public health community should expect this topic to remain a contentious theme for the foreseeable future.

In such a climate, the presence of an online database providing easy access to statutes, regulations and court decisions can help public officials, health practitioners and others understand fluoridation’s legal foundations. Access to information can help both policymakers and individuals understand the statutory and legal terrain that governs fluoridation as a widely recommended public health practice.

For information about state laws and regulatory language on fluoridation, visit the Fluoride Legislative User Information Database at [www.fluidlaw.org](http://www.fluidlaw.org).

## Appendix A

### Web Traffic to FLUID (Fluidlaw.org)

Quarter/Year	Total Visits	Avg. Length of Visit
<b>2012</b>		
Jan.-March 2012	5,660	2:59
April-June 2012	6,035	2:46
July-Sept. 2012	8,355	4:16
Oct.-Dec. 2012	10,983	3:10
<b>2013</b>		
Jan.-March 2013	15,879	2:30
April-June 2013	14,783	3:56
July-Sept. 2013	13,776	6:02
Oct.-Dec. 2013	12,543	5:08
<b>2014</b>		
Jan.-March 2014	12,402	4:15
April-June 2014	14,416	3:13
July-Sept. 2014	15,047	2:19
Oct.-Dec. 2014	16,334	3:17
<b>2015</b>		
Jan.-March 2015*	12,361	2:37

\* – Because analytics for the first quarter of 2015 were acquired on March 10, 2015, the data on site visits were pro-rated to calculate a total for the quarter.



## Sources

<sup>1</sup> "Fluoridation Basics," U.S. Centers for Disease Control and Prevention, July 2013,

<http://www.cdc.gov/fluoridation/basics/>; "Protecting All Children's Teeth (PACT)," a training module by the American Academy of Pediatrics,

[http://www.aap.org/oralhealth/pact/ch6\\_intro.cfm](http://www.aap.org/oralhealth/pact/ch6_intro.cfm); "Fluoride & Fluoridation," American Dental Association, <http://www.ada.org/fluoride.aspx>; *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*, Institute of Medicine (2011), 63,

[http://books.nap.edu/openbook.php?record\\_id=13116](http://books.nap.edu/openbook.php?record_id=13116).  
<sup>2</sup> *Oral Health E-Newsletter*, American Academy of Pediatrics, April 2011, <http://oralhealth.circumpolarhealth.org/files/2013/05/April-11.pdf>.

<sup>3</sup> *The Power of Prevention*, Schuyler Center Oral Health Leadership Team, January 2015, 8, [http://www.scaany.org/wp-content/uploads/2015/02/The\\_Power\\_of\\_Prevention\\_Jan\\_20151.pdf](http://www.scaany.org/wp-content/uploads/2015/02/The_Power_of_Prevention_Jan_20151.pdf).

<sup>4</sup> Conn. Gen. Stat. § 19a-38 (2013); Ohio Rev. Code Ann. § 6109.20 (West 2012)

<sup>5</sup> Phone interview with Linda Ferraro, director of oral health for the Connecticut Department of Public Health, December 9, 2014.

<sup>6</sup> "Evidence-based strategies: 20. Community water fluoridation," Healthy Alaskans 2020, Alaska Department of Health and Social Services, <http://hss.state.ak.us/ha2020/EBS-20.htm>; "Water Fluoridation Program," Indiana State Department of Health, accessed on February 17, 2015 at <http://www.in.gov/isdh/23287.htm>; and "Fluoride," Montana Department of Public Health and Human Services, accessed on February 17, 2015 at <http://dphhs.mt.gov/publichealth/oralhealth/OHFluoride>.

<sup>7</sup> "Community Water Fluoridation Model," Rural Assistance Center, U.S. Department of Health and Human Services, accessed on March 3, 2015 at <http://www.raonline.org/communityhealth/oral-health/2/community-water-fluoridation-model>.

<sup>8</sup> "Resources and References," Valparaiso Fluoride Commission, Valparaiso City Utilities, May 5, 2014, <http://www.ci.valparaiso.in.us/Archive/ViewFile/Item/2715>. (Note: The city council accepted the Commission's recommendation to continue fluoridation.)

<sup>9</sup> "ADA, Association of State and Territorial Dental Directors, CDC Honor Fluoridation Efforts of States, Communities," press release by the American Dental Association, June 10, 2013,

<http://www.ada.org/en/press-room/news-releases/2013-archive/june/ada-association-of-state-and-territorial-dental-directors-cdc-honor-fluoridation-efforts-of-states>; Leon Stanislav, "Be proactive: Do your part to protect oral health by advocating water fluoridation," a My View column published in *ADA News*, January 2, 2012,

<http://www.ada.org/en/publications/ada-news/viewpoint/my-view/2012/january/be-proactive-do-your-part-to-protect-oral-health-by-advocating-water-fluoridation>.

<sup>10</sup> "Web Resources/Videos," Pennsylvania chapter of the American Dental Hygienists' Association, accessed on March 6, 2015 at [http://pdhaonline.org/?page\\_id=183](http://pdhaonline.org/?page_id=183).

<sup>11</sup> "Public Database Tracks Community Water Fluoridation," News – *Dimensions of Dental Hygiene*, February 2013, [http://www.dimensionsofdentalhygiene.com/2013/02\\_February/Departments/News.aspx](http://www.dimensionsofdentalhygiene.com/2013/02_February/Departments/News.aspx).

<sup>12</sup> "Is Water Fluoridation Legal?" Oral Answers blog, article published on June 10, 2011, <http://www.oralanswers.com/is-water-fluoridation-legal/>.

<sup>13</sup> "Community Water Fluoridation," Texas for Fluoride, a website managed by the Texas Oral Health Coalition, Inc., accessed on February 11, 2015 at <http://www.fluoridefortexas.txohc.org/>.

<sup>14</sup> Comments written to CDHP by Beth Stewart, executive director of the Texas Oral Health Coalition, Inc., on, March 9, 2015.

<sup>15</sup> "Children's Oral Health: Advocacy," American Academy of Pediatrics, accessed on March 5, 2015 at <http://www2.aap.org/oralhealth/Advocacy.html>;

"Community water fluoridation," Iowa Public Health Association, accessed on March 4, 2015 at <http://www.iowapha.org/CWF>.

<sup>16</sup> *Medical Record of the Berks County Medical Society*, Berks County Medical Society, Autumn 2013, 15, [http://www.berkscms.org/uploads/medical\\_record/2013/104-3.pdf](http://www.berkscms.org/uploads/medical_record/2013/104-3.pdf).

<sup>17</sup> "Life Course Indicator: Fluoridation," Association of Maternal and Child Health Programs, Winter 2013-14, [http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-05\\_Fluoridation\\_Final-5-4-2014.pdf](http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-05_Fluoridation_Final-5-4-2014.pdf). (Note: Fluoridation and the other 62 Life Course Indicators are enumerated on the website of the Association of Maternal and Child Health Programs,

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<http://www.amchp.org/programsandtopics/data-assessment/lists/lifecourseindicators/allitems.aspx>.)

<sup>18</sup> "Water," League of Women Voters of the Cincinnati Area, October 5, 2011,

[http://www.lwvcincinnati.org/files/WATER\\_10-5-11.pdf](http://www.lwvcincinnati.org/files/WATER_10-5-11.pdf).

<sup>19</sup> J. Wurzburg and C. P. Parver, "Community Water Fluoridation around the Nation: Significant Case Law and Legislation," *Health Law & Policy Brief*, 7:1, Spring 2013,

<http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1002&context=hlp>.

<sup>20</sup> Comment posted online by BillyBudd to: "In Dallas, an Anti-Fluoride Movement for Once Not Dismissed," Dallas Observer, May 8, 2014,

<http://www.dallasobserver.com/2014-05-08/news/in-dallas-an-anti-flouride-movement-for-once-not-dismissed/>.

<sup>21</sup> Dental Watch, updated on February 22, 2015,

<http://www.dentalwatch.org/>.

<sup>22</sup> Email message by Chuck Haynie to the Children's Dental Health Project, October 7, 2014 at 3:26 p.m. (ET).

<sup>23</sup> "Our Water & the Law," Clean Water Maine, accessed on January 14, 2015 at

<http://cleanwatermaine.blogspot.com/p/about-our-water.html>.

<sup>24</sup> "Fluoride Legislative Database," Fluoride Free Kansas, accessed on March 5, 2015 at

<http://fluoridefreekansas.org/resources/fluoride-legislative-database-fluid/>.