

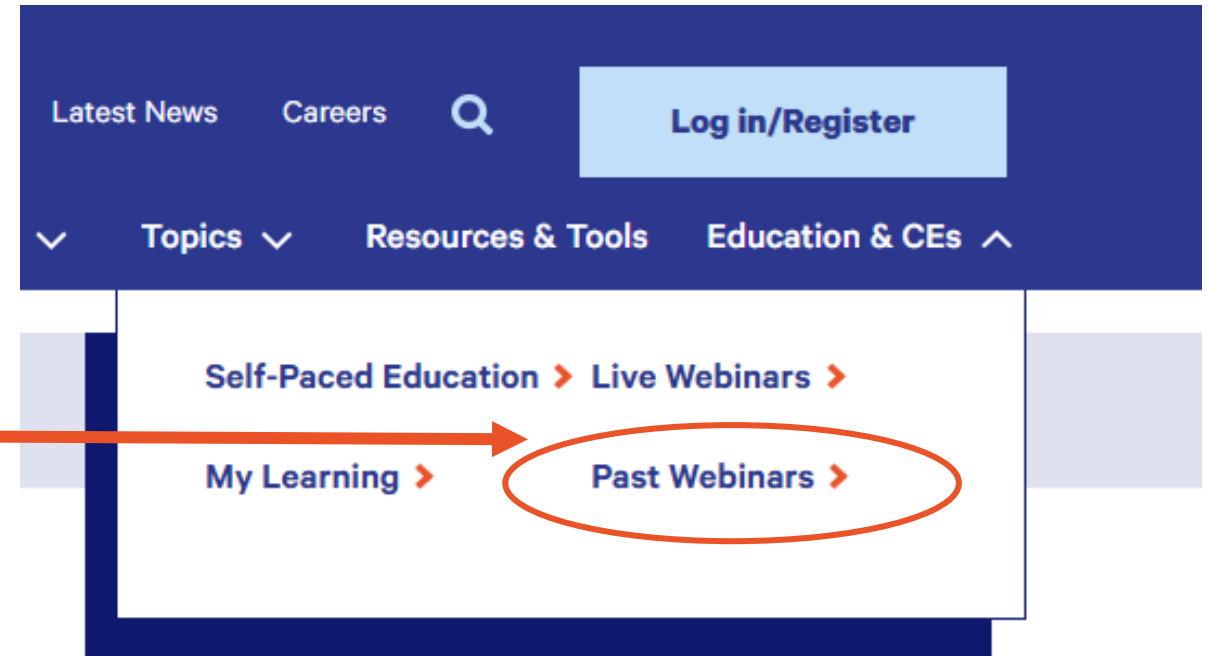
Community Water Fluoridation: How Dental Professionals Can Lead the Conversation

April 10, 2025

Webinar Guidelines

- All lines will be muted to avoid background noise.
- Today's presentation and slides will be available by next Monday on our website at **carequest.org** under the “**Education**” tab. Go to “**Past Webinars.**”

We welcome your feedback on how we can improve our webinars.



The CareQuest Institute for Oral Health is an ADA CERP Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CERP.

CE Credit Delivery

To Receive CE Credits:

You have two options to receive your continuing education (CE) credit for attending the webinar.

1. In 24 hours, you will receive an email sent to the email address you used to register. This email will include instructions and a link to complete the required survey and download your CE certificate.
1. After 24 hours, you can also log into your account on the carequest.org website. Navigate to the "My Learning" tab, where you'll find your survey. Complete that to receive your CE credit.

Complete the evaluation by **Friday, April 18.**

Even if you're not seeking CE credits, we welcome your feedback on how we can improve our webinars.

The CareQuest Institute for Oral Health is an ADA CERP Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CERP.

Accessibility Logistics

- Feel free to enter your questions into the **Question & Answer box** throughout the presentations.
- We will turn to your questions and comments toward the end of the hour.
- If you would like **closed captioning** for this program, please go to the bottom right-hand corner of your screen, select “more” from the toolbar, and then “captions” to enable this function.



Webinar

Community Water Fluoridation:

How Dental Professionals
Can Lead the Conversation



Thursday
April 10, 2025



7-8 p.m. ET

ADA CERP Credits: 1



Moderator

Scott L. Tomar, DMD, DrPH

University of Illinois Chicago College of Dentistry



Presenter

Elizabeth Carmen Lense, DDS, MSHA, FAAOMP

American Dental Association



Presenter

Matt Crespín, MPH, RDH, FADHA

Children's Health Alliance of Wisconsin

Learning Objectives

- **Analyze** the scientific evidence supporting community water fluoridation and its role in promoting oral health.
- **Evaluate** patient inquiries and media narratives surrounding community water fluoridation by critically assessing evidence-based research.
- **Apply** clear communication strategies to engage patients, foster collaborative relationships, and empower shared decision-making.

Poll Questions

1. **How confident do you feel discussing community water fluoridation with your patients?**
 - a) I feel confident discussing the benefits and evidence of community water fluoridation with patients.
 - b) I can answer some questions but would like more guidance or resources.
 - c) I'm not confident and tend to avoid the topic with patients.
 - d) I do not typically discuss community water fluoridation with patients.

Poll Questions

1. **Which statement best reflects your current view on community water fluoridation?**
 - a) I fully support community water fluoridation and actively promote it to patients.
 - b) I support it but sometimes find it difficult to explain or advocate for.
 - c) I'm unsure—I would like to better understand the science and implications.
 - d) I have concerns about community water fluoridation.
 - e) I prefer not to share.

Webinar

Community Water Fluoridation:

How Dental Professionals
Can Lead the Conversation



Thursday
April 10, 2025



7-8 p.m. ET

ADA CERP Credits: 1



Moderator

Scott L. Tomar, DMD, DrPH

University of Illinois Chicago College of Dentistry



Presenter

Elizabeth Carmen Lense, DDS, MSHA, FAAOMP

American Dental Association



Presenter

Matt Crespín, MPH, RDH, FADHA

Children's Health Alliance of Wisconsin

Leading the Conversation on Water Fluoridation



Elizabeth C. Lense, DDS, MSHA, FAAMOP


April 10, 2025

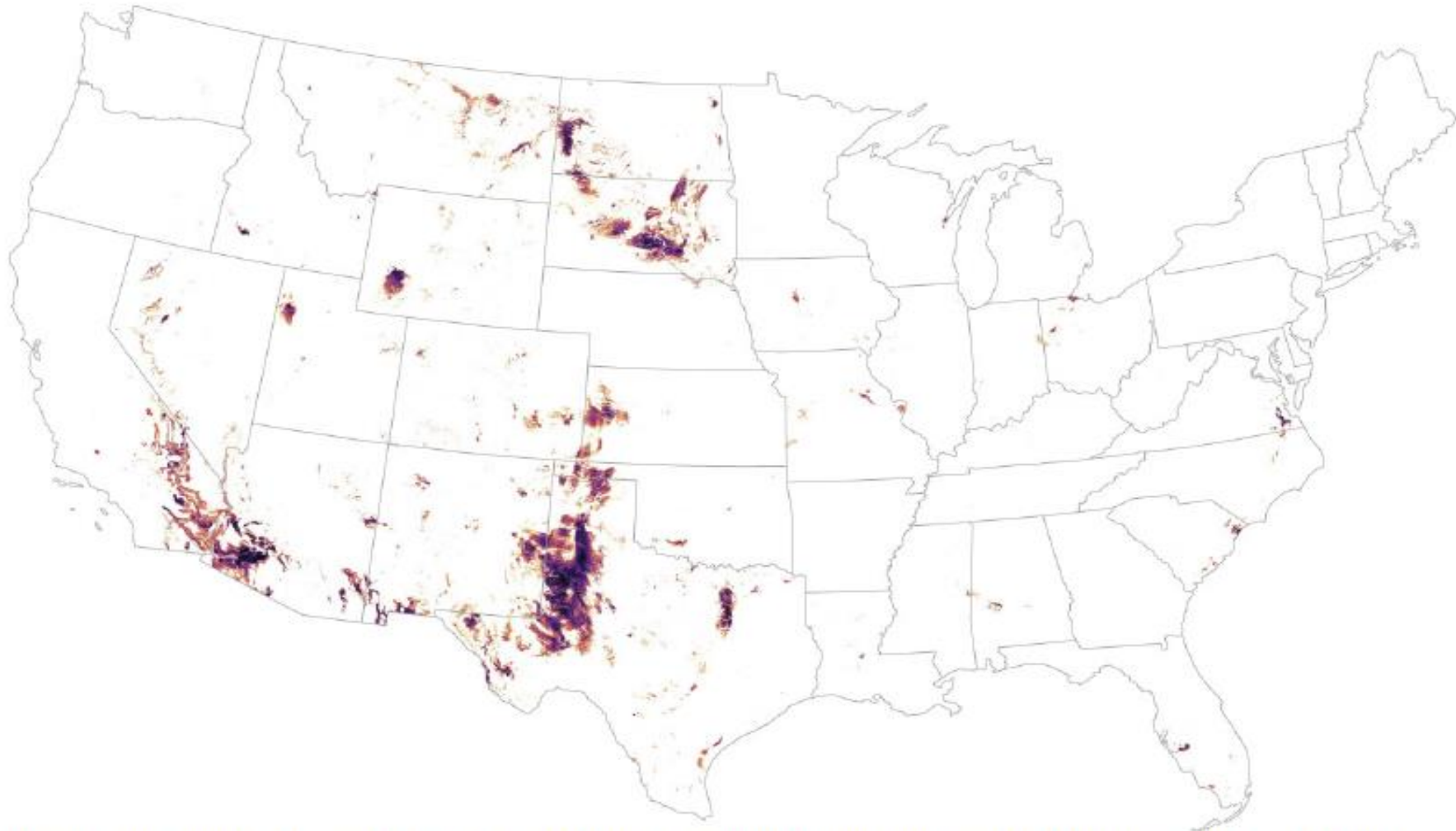
Fluoride Occurs Naturally in. . .



- Plants
- Soil
- Air
- Water

Where fluoride is naturally high in groundwater

Probability of high fluoride 50%  100%



Results are modeled based on nearly 219,000 U.S. groundwater samples. High fluoride exceeds 1.5mg/L.

Source: Joel Podgorski and Michael Berg, Swiss Federal Institute of Aquatic Science and Technology



History

- In **1901**, Dr. Fredrick McKay identified “Colorado brown spots” on teeth, and invited Dr. G.V. Black to help find cause...
- Discovered to be **fluoride**
- Dr. Henry Klein and other researchers confirmed areas in the SW with higher fluoride in their water had less decay
- Dr. H. Trendley Dean — in areas around 1 ppm F less decay and no brown spots

Fluoridation in the US

- Fluoridation defined as “adjustment” of fluoride in water
- (NOT mass medication)
- In 2015, set at 0.7 mg/L (equivalent of 3 drops in 55-gal barrel)

Fluoride: Small Solution. Big Benefits.

The U.S. Department of Health and Human Services announced a recommendation that community water systems adjust the amount of fluoride to **0.7 mg/L** to achieve an optimal fluoride level to help prevent tooth decay.

Just how much is 0.7 milligrams per liter of water? It's like ...

 <p>23 miles</p> <p>1"</p>	 <p>1 minute</p> <p>2.74 years</p>	 <p>1c</p> <p>\$14,000</p>
1 inch in 23 miles	1 minute in 1,000 days	1 cent in \$14,000

What difference does a little fluoride make? The public health benefits are big. Before water fluoridation children had about **3 times** as many cavities. For more information, visit ADA.org/fluoride.

ADA American Dental Association®
America's leading advocate for oral health

1 inch in 23 miles 1 minute in 1,000 days 1 cent in \$14,000

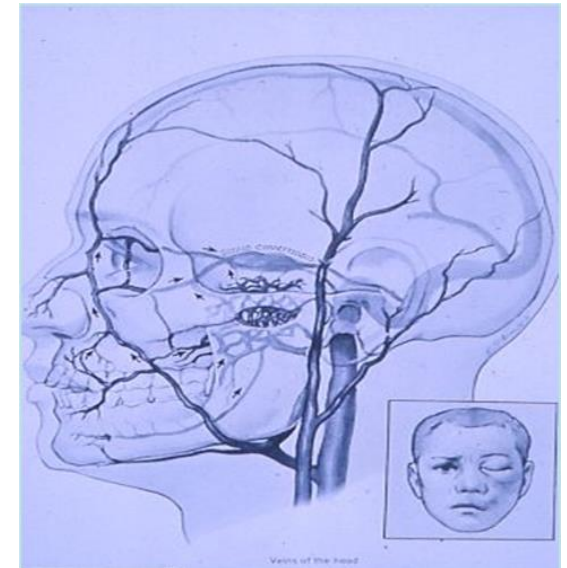
Why Are We Still Fluoridating?



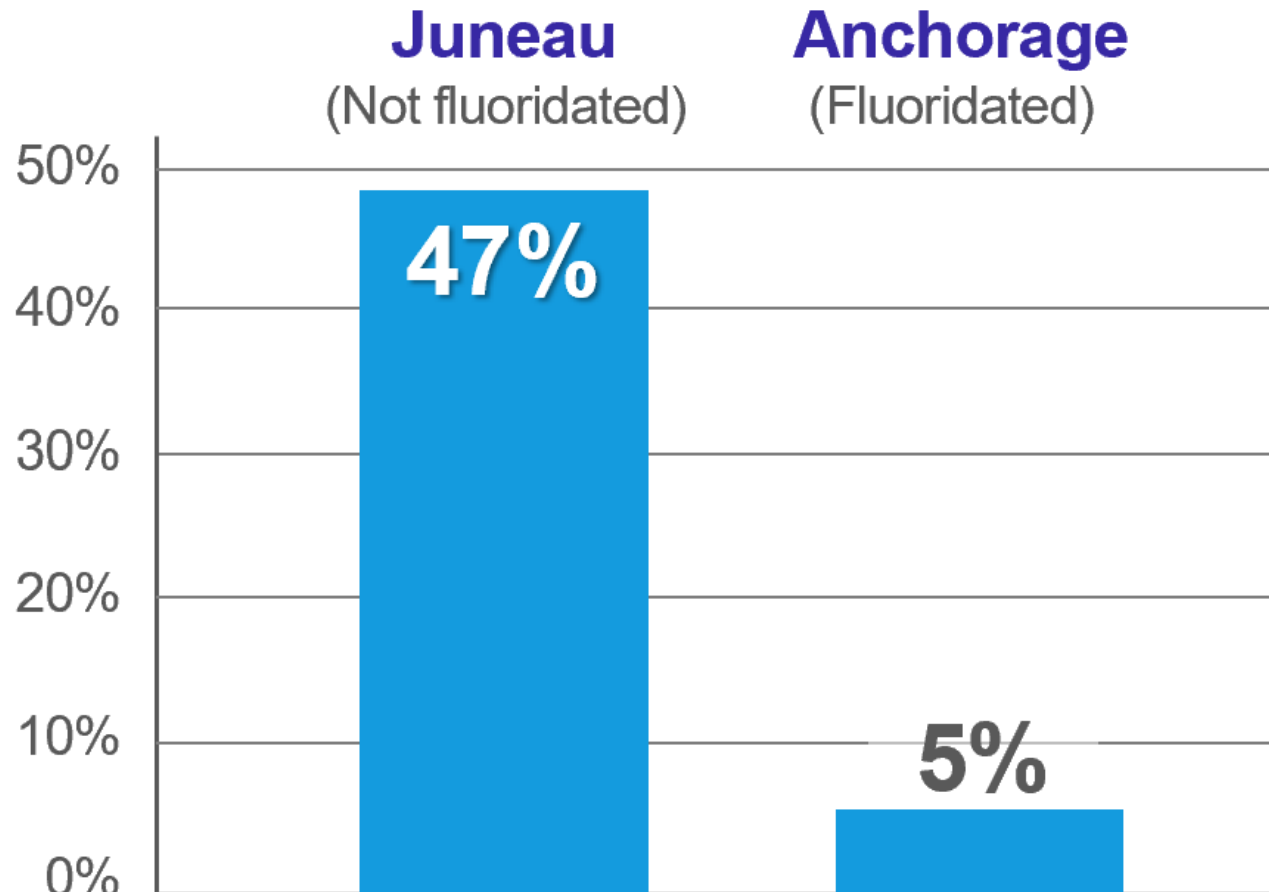
Tooth Decay Is Still a Problem

- By age 8, over half of children have had a cavity; by age 18, over 2/3 have had a cavity
- **Children from low-income households are twice as likely to have cavities as children from higher-income households**
- On average, 34 million school hours are lost each year because of emergency dental care, and over \$45 billion in US productivity is lost each year due to untreated dental disease

Consequences



If Fluoride Stops – Decay & Costs Go Up!



(**Source:** J. Meyer et al., “The Impact of Water Fluoridation on Medicaid-Eligible Children and Adolescents in Alaska,” *Journal of Primary Prevention*, 2022)

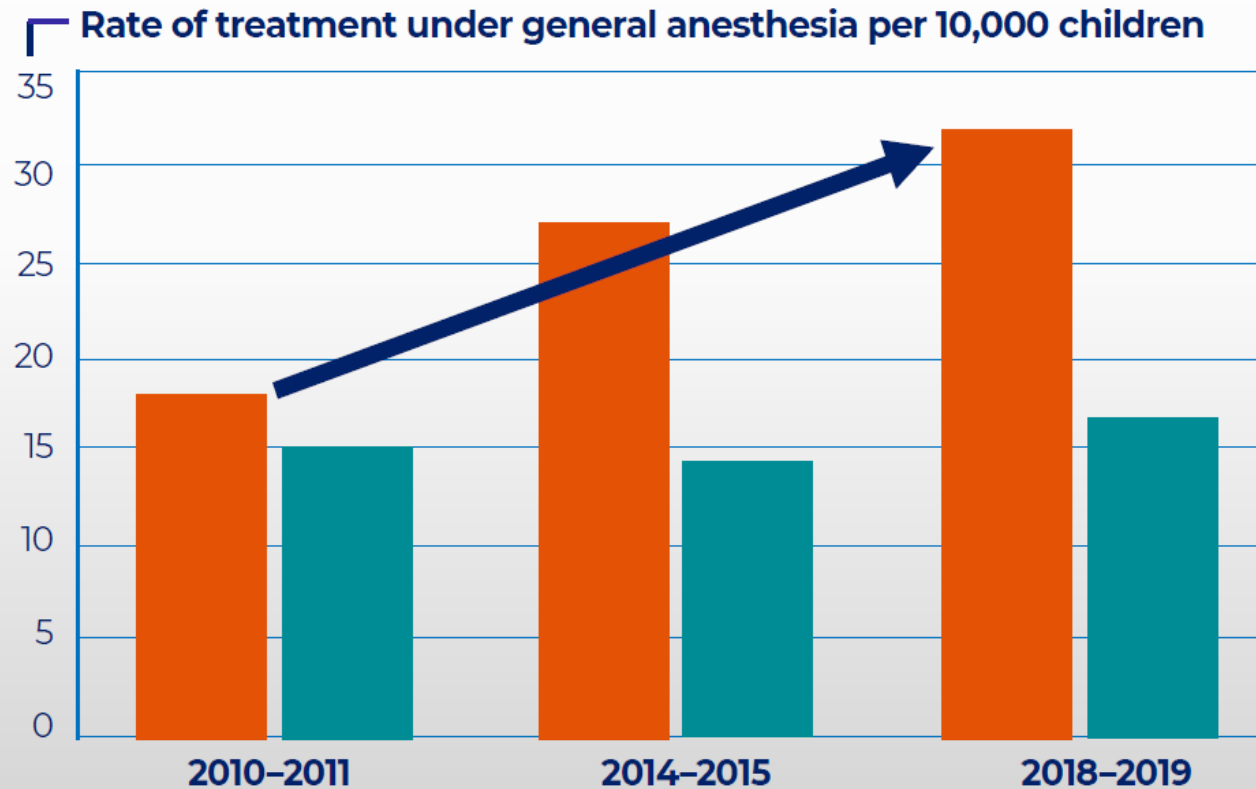
- In 2007, the city of Juneau decided to stop fluoridating, but Anchorage continued.
- Prior to stopping, the cities had comparable costs for treating decay.
- Nine years later, a study looked at increases in the avg per child cost to treat dental decay.

How severe decay is treated

The need for GA treatment in Calgary rapidly increased

The GA treatment rate in **Calgary** jumped by 78%.

Calgary children
Edmonton children



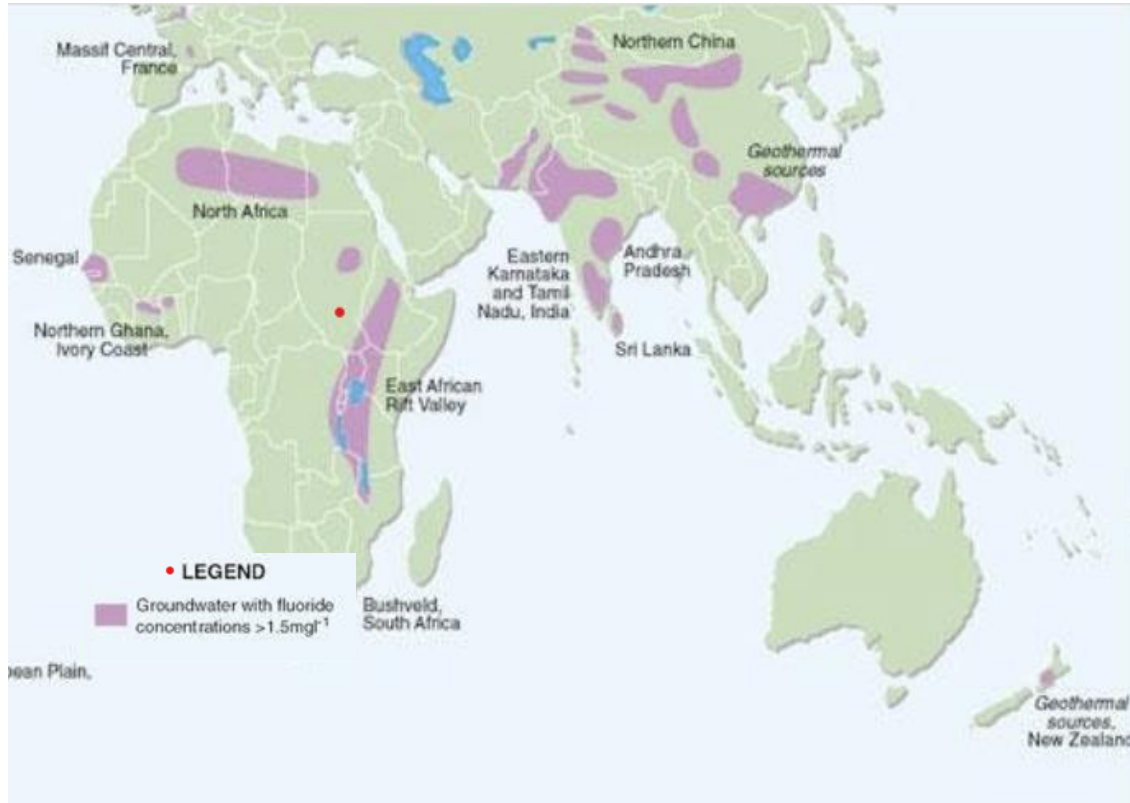
Economic Benefits of Fluoridation

- Studies show that for populations **>1000**, fluoridated water can save **\$20** in dental treatment for every \$1 invested.
- Studies from **LA, TX, and NY** showed Medicaid dental costs were lower in fluoridated communities.
- Between **1990-2000**, the US saved **\$25.7 billion** in dental treatment costs because of water fluoridation.

Is water fluoridation safe?



Fluoridation Safety



The only identified effect of CWF is **minimal-mild fluorosis**.

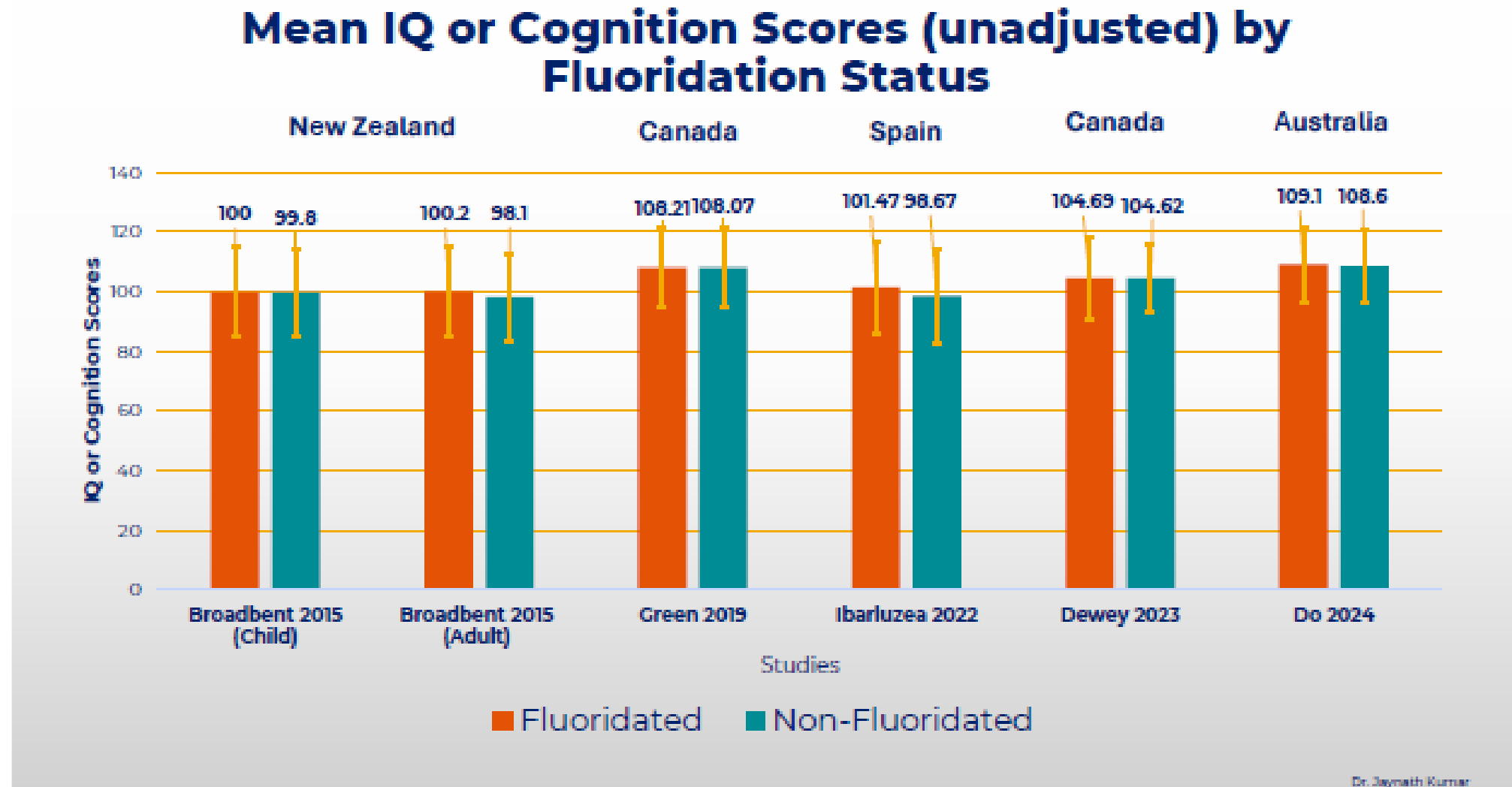
Dose makes a difference —
... Anything can be toxic

High natural fluoride —
skeletal fluorosis; IQ studies

National Toxicology Program Monograph on Fluoride and Neurocognition

- Submitted to NASEM twice for review and highly criticized; then submitted to their own peer-reviewers
- 53/72 studies (74%) were of low quality and high risk of bias
- States on 3rd page- in bold print that what it does not do is address water fluoridation as practiced in the US and Canada at 0.7 mg/L
- Concludes “with a moderate degree of confidence” that higher exposure (>1.5mg/L) to fluoride is associated with lower IQ in children
- None of the studies reviewed were from the US, but rather from countries such as China, India, Iran, Pakistan w/natural high levels of fluoride

Studies at Community Water Fluoridation Levels



Facing a Challenge or Initiating Fluoridation

1. Contact your local dental and hygiene society, oral health coalition, and local or state oral health department — let them know what's happening.

2. Contact the ADA and AFS (American Fluoridation Society) — we can help with information, research, identifying partners, and developing strategies.

Look for Other Messengers

- You are not alone! Talk to your local pediatricians, family practitioners, nurses — make them aware of the situation.
- Contact your school nurse, teachers, **water operators** — give them fluoride information.
- Ask them to come to the Council Meeting with you.



Get Involved in Your Community . . .



- Don't give up — even if you lose this round, keep the issue in the public's mind.
- In general:
 - Get involved in local organizations — PTA, Rotary, Community Health Center Boards, Utility Boards, be a trusted source for oral health info.
 - **Discuss drinking fluoridated water with your patients often — inoculate them with facts.**

Fluoride questions?
Contact Dr. Liz Lense at
lensee@ada.org



Matt Crespin, MPH, RDH, FADHA

Executive Director - Children's Health Alliance of Wisconsin



Leading the
conversation on
fluoridation



Community Water Fluoridation Basics

- Provides frequent exposure to low amount of fluoride
- About 25% reduction in tooth decay
- All consumers benefit
- Cost effective
- Safe
- Does not require families to pay extra money or change habits
- Not dependent on access to or availability of professional services



Leading the Discussion



Guide the Conversation

- Ask questions regarding eating and drinking habits to assess risk.
- What type of water do they drink? Tap? Bottled? Filtered?
- When questions about CWF come up, listen, acknowledge the concern and provide some resources and simple information.
- Encourage them to seek information from reputable sources.
- Don't argue if they don't seem open to a discussion.



Keep the Message Simple



- Fluoride occurs naturally in nearly all sources of drinking water.
- May not be the amount proven to prevent tooth decay.
- CWF is the adjustment of levels to 0.7 ppm which is the recommended level that is safe and protects teeth.
- Fluoridation is similar to fortifying other foods like adding Vitamin D to milk or folic acid to breads.



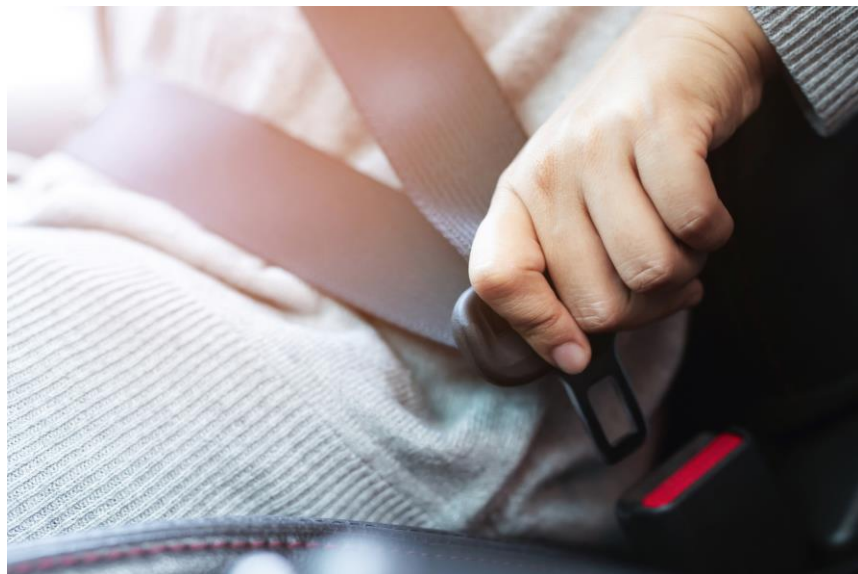
Ways to Validate Questions



- I've heard that question from other patients, so I'm happy to clarify what the evidence shows.
- It can be hard to find accurate information about this topic online, so let me do what I can to shed light on this.
- I'm a parent too, so I can understand why you might ask that question. Let me explain why we as parents have nothing to worry about.



Use Analogies Patients Understand



Fluoride: Small Solution. Big Benefits.

The **U.S. Department of Health and Human Services** announced a recommendation that community water systems adjust the amount of fluoride to **0.7 mg/L** to achieve an optimal fluoride level to help prevent tooth decay.

Just how much is 0.7 milligrams per liter of water? It's like ...



1 inch in 23 miles



1 minute in 1,000 days



1 cent in \$14,000

What difference does a little fluoride make? The public health benefits are big. Before water fluoridation children had about **3 times** as many cavities.

For more information, visit ADA.org/fluoride.

ADA American Dental Association®

America's leading advocate for oral health

Source: American Dental Association



What Your Patients Are Hearing

Children exposed to higher fluoride levels have lower IQs, a government study finds

By Brenda Goodman, CNN
⌚ 8 minute read · Updated 2:38 PM EST, Mon January 6, 2025



JAMA Pediatrics | [Original Investigation](#)
Fluoride Exposure and Children's IQ Scores
A Systematic Review and Meta-Analysis

AP

☰

WORLD

U.S.

POLITICS

SPORTS

ENTERTAINMENT

BUSINESS

SCIENCE

FACT CHECK

ODDITIES

BE WELL

NEWSLET

•

Stellantis

Laura Loomer

Mortgage rates

Mehmet Oz

Joe Milton

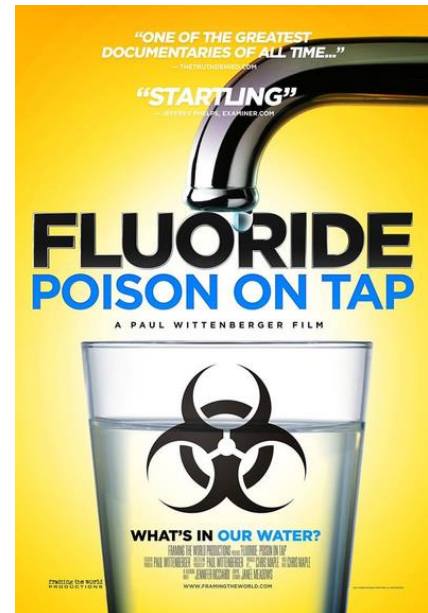
POLITICS

Utah bans fluoride in public drinking water, a first in the US

HEALTH NEWS

Fluoride once again scrutinized for possible effect on children's brains

A new review of previous research links fluoridated water with slightly lower IQs in children. Pediatric dentists are adamant that the mineral is critical for kids' health.



What Your Patients Are NOT Hearing

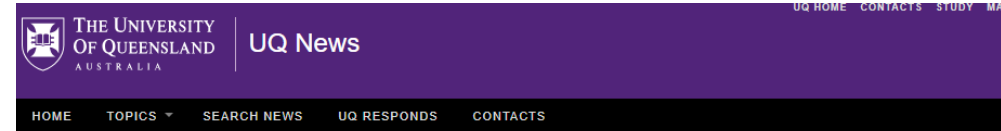
HOW FLUORIDE WORKS



Build a better foundation for healthy teeth and keep your teeth stronger, longer. Fluoride in water, 70 years and going strong. At a faucet near you. Visit www.CDC.gov/Fluoridation for more information.



The NTP review was designed to evaluate total fluoride exposure from all sources and was not designed to evaluate the health effects of fluoridated drinking water alone. **It is important to note 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.** The NTP found no evidence that fluoride exposure had adverse effects on adult cognition.



Study finds fluoride in water does not affect brain development

With the participants now aged 16 to 26 years old, we found those who'd consistently been drinking fluoridated water had an IQ score 1.07 points higher on average than those with no exposure," Professor Do said.

"We also found people who had dental fluorosis – a reliable biomarker related to excessive fluoride intake in childhood – had IQ scores 0.28 points higher on average than those without.

After a decade of cavities, will Calgary put fluoride back in its water supply?

Anti-fluoride activists are fighting again to keep the chemical out of Calgary's water supply. But there are holes in their argument.

BY JASON MARKUSOFF



SUBSCRIBE CLINICAL MASTERMIND PODCAST EARN CE FREE SAMPLES INNOVATOR AWARDS

WELLNESS DENTISTRY DENTAL HYGIENE FRONT OFFICE DENTAL ASSISTING PRACTICE

too expensive, says a 12/6 article in The Times. Now, 15 years later, they're putting it back in.

What happened in Calgary

The *Times* article details what happened in Calgary after fluoride was removed: "multiple studies" showed that caries and caries treatments increased in children in the subsequent years. The number of children receiving IV antibiotics for dental infections at Alberta Children's Hospital increased by 700% from 2011 to 2018. The majority of these patients were under five years old.



Where to Send Patients

American Academy of Pediatrics: www.ilikemyteeth.org

American Dental Association: www.ada.org/fluoride

American Fluoridation Society: www.americanfluoridationsociety.org





THANK YOU

mcrespin@childrenswi.org | chawisconsin.org

Question and Answer

Submit questions for the panelists in the **Q&A box**



AMERICA'S PEDIATRIC DENTISTS
THE BIG AUTHORITY on little teeth®

MYTH

Fluoride causes fluorosis, so it shouldn't be used at all.

FACT

Dental fluorosis (white spots on teeth) is typically mild and occurs when young children consume too much fluoride while their teeth are developing. It's preventable by using the correct amount of fluoride toothpaste and monitoring children during brushing.



AMERICA'S PEDIATRIC DENTISTS
THE BIG AUTHORITY on little teeth®

MYTH

Fluoride is not natural and is unsafe for children.

FACT

Fluoride occurs naturally in water and many foods! Like other nutrients, fluoride is safe in appropriate amounts. The levels used in water fluoridation, toothpaste, and professional treatments are well below toxic levels and are carefully regulated to ensure safety.



AMERICA'S PEDIATRIC DENTISTS
THE BIG AUTHORITY on little teeth®

MYTH

Fluoride is unnecessary once adult teeth come in.

FACT

Fluoride protects teeth at all ages, not just during childhood! Adults also benefit from fluoride's ability to repair early stages of tooth decay and protect enamel.



Share AAPD's
Fluoride: Myth vs. Fact
images on social media:



Concluding Poll Question

1. **After attending this webinar, how confident do you feel discussing community water fluoridation with your patients?**
 - a) I now feel confident discussing the benefits and evidence of community water fluoridation with patients.
 - b) I feel more prepared but would still like additional resources or training.
 - c) I feel about the same as I did before the webinar.
 - d) I do not plan to discuss community water fluoridation with patients.

Scott L. Tomar, DMD, DrPH
Professor and Associate Dean
for Prevention and Public Health Sciences
University of Illinois Chicago College of Dentistry
stomar@uic.edu



CE Credit Delivery

To receive CE credits:

You have two options to receive your continuing education (CE) credit for attending the webinar.

1. In 24 hours, you will receive an email sent to the email address you used to register. This email will include instructions and a link to complete the required survey and download your CE certificate.
1. After 24 hours, you can also log into your account on the carequest.org website. Navigate to the “**My Learning**” tab, where you’ll find your survey. Complete that to receive your CE credit.

Complete the evaluation by **Friday, April 18.**

Even if you’re not seeking CE credits, we welcome your feedback on how we can improve our webinars.

The CareQuest Institute for Oral Health is an ADA CERP Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CERP.

Webinar Evaluation

Complete the evaluation by **Friday, April 18** to receive CE credit. You will receive a link to the survey in 24 hours.

Next Webinar:

Dental Ethics: Navigating Dilemmas and Ensuring Well-Being in Daily Practice on **April 24 at 7 p.m. ET**

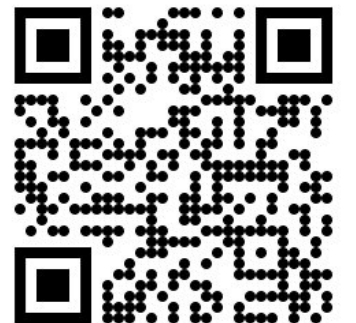
And we invite you to take a minute to sign up for our newsletter to get more information on future webinars!

Sign up for News and Updates

Email*

CareQuest Institute for Oral Health uses the information you provide to share updates on work and offerings to improve the oral health of all. You may unsubscribe at any time (See [Privacy Policy](#)).

Submit



Stay Connected

Follow us on social media!



@CareQuestInstitute



@CareQuestInstitute



@CareQuestInst



CareQuest Institute

