

How We Got Here

Early Discovery: "Colorado Brown Stain" (1901-1930s)

Early 1900s, Dr. Frederick McKay discovered brown-stained teeth w/ minimal cavities - "Colorado Brown Stain".

1930s, Dr. H. Trendley Dean identified 1 ppm as the optimal fluoride level to prevent tooth decay, minimize stain, and paved the way for water fluoridation.

Groundbreaking Experiment (1940s-1950s)

1945, Grand Rapids, Michigan, became the first city to fluoridate its water, leading to a sharp decline in cavities over 15 years.

1950, the ADA and U.S. Public Health Service endorse fluoridation as safe and effective for preventing tooth decay.

Global Perspective on Fluoridation

The U.S. pioneered water fluoridation, which spread globally in the 1950s. Canada, Australia, and Ireland adopted it, reducing cavity rates.

Regions like Switzerland and Latin America use alternatives like fluoridated salt.

U.S. Lowers Fluoride Levels (2015)

Early 21st century, widespread fluoride use in toothpaste, rinses, and treatments led the U.S. Public Health Service to update guidelines.

2015, the optimal water fluoride level was set at 0.7 ppm to prevent cavities while minimizing fluorosis, based on decades of research.

Science Behind Fluoride

Fluoride repairs enamel, reverses early decay, reduces cavity-causing bacteria, and strengthens teeth against acid.

Decades of research confirm its safety and effectiveness at 0.7 ppm in the U.S.

Misunderstood

Fluoride has faced criticism, but time tested organizations like WHO, CDC, and NIDCR confirm its safety.

Peer-reviewed studies show no link to systemic health issues, and the CDC lists water fluoridation as a top public health achievement of the 20th century.

Continuing to Protect All Communities

In the U.S., 73% of the population has fluoridated water.

Globally, fluoridated water, fluoride toothpaste, rinses, varnishes and fluoridated salt improve access, with ongoing efforts to expand its benefits to underserved communities.

2.0+ ppm Fluoride & IQ Studies

A study on high fluoride levels (2.0+ mg/L or ppm) show potential IQ effects. Focusing on regions that exceed U.S. standards.

At the U.S. optimal level (0.7 mg/L), research confirms fluoride is safe and effective, with no IQ impact. This study reaffirms the importance of rigorous monitoring to ensure safe water for all communities across the USA. .

Fluoride Files

Peer-Reviewed Studies and Reviews

1. Broadbent et al. (2014): Community water fluoridation and intelligence: Prospective study in New Zealand. Published in American Journal of Public Health.
 - a. Link: [AJPH Study on Fluoride and IQ](#)
2. National Academies of Sciences, Engineering, and Medicine (2006): Fluoride in Drinking Water: A Scientific Review of EPA's Standards.
 - a. Link: [NAS Review of Fluoride](#)
3. McDonagh et al. (2000): Systematic review of water fluoridation. Published in the British Medical Journal (BMJ).
 - a. Link: [BMJ Fluoridation Review](#)

Public Health Organizations

1. Centers for Disease Control and Prevention (CDC): Community Water Fluoridation Facts.
 - a. Link: [CDC on Fluoridation](#)
2. World Health Organization (WHO): Fluorides and oral health.
 - a. Link: [WHO Fluoride Guidelines](#)
3. U.S. Environmental Protection Agency (EPA): Basic Information about Fluoride in Drinking Water.
 - a. Link: [EPA on Fluoride](#)

Independent and Non-Governmental Resources

1. Cochrane Reviews: Systematic reviews on water fluoridation and dental health outcomes.
 - a. Link: [Cochrane Fluoridation Reviews](#)
2. The Pew Charitable Trusts: Articles on fluoride's role in oral health.
 - a. Link: [Pew Fluoride Policy](#)