

Savings from Water Fluoridation: What the Evidence Shows

Community water fluoridation saves money! It offers one of the [greatest returns-on-investment of any public health measure](#). It reduces the amount of money we spend to fill cavities or pull teeth. It means we lose less time at work or school. And it means less pain and suffering,

The dollars spent on fluoridation represent a fraction of the cost to treat dental disease, and in recent decades, the evidence demonstrating cost savings has grown.

- For most cities, every \$1 invested in water fluoridation saves \$32 in dental treatment costs.¹
- A **Texas** study confirmed that the state saved \$24 per child, per year in Medicaid expenditures for children because of the cavities that were prevented by drinking fluoridated water.²
- A 2010 study in **New York** State found that Medicaid enrollees in less fluoridated counties needed 33% more fillings, root canals, and extractions than those in counties where fluoridated water was more available.¹ As a result, the treatment costs per Medicaid recipient were \$23.65 higher for those living in less fluoridated counties.³
- Researchers estimated that in 2003 **Colorado** saved nearly \$149 million in unnecessary dental treatment costs by fluoridating public water supplies—an average savings of roughly \$61 per person.⁴
- A 1999 study compared fluoridated counties in **Louisiana** to those without and found that low-income children in communities without fluoridated water were three times more likely than those in communities with fluoridated water to need dental treatment in a hospital operating room.⁵
- By reducing tooth decay, fluoridation makes it less likely that toothaches or other serious dental problems will drive people to hospital emergency rooms (ERs)—where costs are very high. A 2010 survey of hospitals in **Washington State** found that dental problems were the most common reason uninsured patients visited ERs.⁶

¹ The Texas study revealed cost savings of \$24 per child, per year. The New York study found that the dental treatment costs per Medicaid recipient were \$23.65 higher for those living in less fluoridated counties. The original figure (\$23.63) was corrected in a subsequent edition of this journal and clarified to be \$23.65. (See Letters to the Editor. Public Health Reports. 2010:125; 788. Water Fluoridation Costs in Texas: Texas Health Steps (EPSDT-Medicaid). Texas Department of Oral Health Website (2000).

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Sources

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- ² Water Fluoridation Costs in Texas: Texas Health Steps (EPSDT-Medicaid). Texas Department of State Health Services website. <http://www.dshs.state.tx.us/dental/Fluoride-Cost.shtm>. Updated December 9, 2013. Accessed July 19, 2018.
- ³ Kumar JV, Adekugbe O, Melnik TA. Geographic variation in Medicaid claims for dental procedures in New York State: role of fluoridation under contemporary conditions [published correction appears in Public Health Rep. 2010;125(6):788]. Public Health Rep. 2010;125(5):647-654. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2925000/>. Accessed July 19, 2018.
- ⁴ Brunson D, O'Connell JM, Anselmo T, Sullivan PW. Costs and savings associated with community water fluoridation programs in Colorado. Prev Chronic Dis. 2005;2(spec issue):A06. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1459459/>. Accessed July 19, 2018.
- ⁵ U.S. Centers for Disease Control and Prevention. Water fluoridation and costs of Medicaid treatment for dental decay – Louisiana, 1995-1996. MMWR Morb Mortal Wkly Rep. 1999;48(34): 753-757. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4834a2.htm>. Accessed July 19, 2018.
- ⁶ Washington State Hospital Association. Emergency room use. <http://www.wsha.org/wp-content/uploads/ERreport.pdf>. Published October 2010. Accessed July 19, 2018.