Health and Economic Benefits of Oral Disease Interventions

- · Oral diseases like cavities and gum disease cause pain and disability for millions of Americans.
- · CDC promotes effective interventions, including dental sealants and community water fluoridation, to prevent cavities and save money.



Oral diseases—which range from cavities to gum disease to oral cancer—cause pain and disability for millions of Americans. 1 Cavities (also called tooth decay) are one of the most common chronic conditions in the United States. Non-Hispanic Black people, Hispanic people, and American Indian and Alaska Native people generally have the poorest oral health compared to other U.S. racial and ethnic groups. 2

- By age 9, half of children have had cavities in their primary (baby) or permanent teeth. 1 in 10 adolescents aged 12 to 19 have at least one untreated cavity.2
- 1 in 5 adults aged 20 to 64 years have untreated cavities, 2 and nearly half of those aged 30 or older show signs of gum disease. 3 If left untreated, these conditions can lead to tooth loss.
- More than 1 in 7 older adults have lost all their teeth.2
- Nearly 3 in 10 older adults who currently smoke have lost all their teeth, compared to about 1 in 10 older adults who never smoked.2

Annual costs for dental care in the United States is \$136 billion.4A

- On average, over 34 million school hours are lost each year because of unplanned (emergency) dental care.
- Almost \$46 billionB is lost in productivity in the United States each year because of untreated oral disease.6
- In 2017, there were 2.1 million emergency room visits for dental emergencies. Medicaid pays for about 69% of these visits for children and about 40% for adults. 7
- During 1996–2013, \$26.5 billionB was spent on dental care for children and adolescents. About 70% of this total was used for preventive services, such as general exams and cleanings, X-rays, and orthodontic treatment (such as braces).8
- Nearly 18% of working-age adults report that the appearance of their mouth and teeth affects their ability to interview for a job. For people with low incomes, the percentage increases to 29%.9

CDC works to improve the nation's oral health by reducing disparities in the rate of cavities and integrating oral health programs into chronic disease prevention and medical care. The agency and its partners promote effective interventions, including dental sealants and community water fluoridation, which are strongly recommended by the U.S. Preventive Services Task Force because they prevent cavities and save money.

- Dental sealants are a quick, easy, and painless way to prevent most of the cavities that children get in their permanent back teeth, where 9 in 10 cavities occur.
- School sealant programs provide dental sealants at no charge to children who are less likely to receive private dental care. Almost 1 million cavities have been prevented in children from low-income households as a result of dental sealants.
- Community water fluoridation is an effective way to deliver fluoride to all community members regardless of age, education, or income. It also saves money for families and the
 U.S. health care system.
- CDC is working to meet the Healthy People 2030 objective of 77.1% of the U.S. population being on community water systems with the recommended amount of fluoride. Currently, 72.3% of the population served by community water systems (more than 209 million people) drink water that contains enough fluoride to protect their teeth. 11

The effectiveness of dental sealants

Dental sealants reduce cavities in permanent molars by 80% for 2 years after placement and continue to protect against 50% of cavities for up to 4 years.

- The benefits of school sealant programs are greater than their cost when they serve children at high risk for tooth decay. These programs become cost-saving after 2 years and save more than \$11\tilde{\C}\$ for every tooth sealed over 4 years.\frac{12}{2}
- Providing sealants to the nearly 7 million children from low-income households who need them could save up to \$300 million in averted dental treatment costs. 13
- One year of providing fluoridated water is estimated to save \$6.5 billion in averted direct and indirect treatment costs.
- Communities served by fluoridated water save an average of \$32<u>D</u> per person a year by avoiding treatment for cavities. Communities of 1,000 or more see an average estimated return on investment of \$20 for every \$1 spent on water fluoridation. 14
- The U.S. health care system could save up to \$100 million E a year if dental offices screened patients for diabetes, high blood pressure, and high cholesterol and referred them for treatment. 15

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- 1. Costs measured in 2018 U.S. dollars.
- 2. Costs measured in 2015 U.S. dollars. Older cost estimates are likely to be underestimates.
- 3. Costs measured in 2014 U.S. dollars. Older cost estimates are likely to be underestimates.
- 4. Costs measured in 2013 U.S. dollars. Older cost estimates are likely to be underestimates.
- 5. Costs measured in 2011 U.S. dollars. Older cost estimates are likely to be underestimates.

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