

Issue At A Glance:

Disparities in Oral Healthcare

Oral health refers to the health of an individual's gums, teeth, and entire oral-facial system, and poor oral health is associated with various chronic diseases. This issue brief explores the disparities in oral healthcare across the nation, as well as efforts by the Biden Administration and the Centers for Disease Control and Prevention to mitigate these disparities.

Introduction

Oral health refers to the health of the teeth, gums, and entire oral-facial system that allows individuals to eat, chew, speak, and smile. Poor oral health is also associated with various chronic diseases, such as diabetes and heart disease.¹ Although the nation's oral health has greatly improved since the 1960s, not all Americans have equal access to dental care.^{2,3} Studies have shown that some racial/ethnic and socioeconomic groups have worse oral health than others due to various conditions in the places where individuals are born, work, live, learn, and play (collectively referred to as the social determinants of health).^{2,4,5}

Additionally, many low-income adults do not have public dental insurance and Medicaid programs are not required to provide dental benefits to adult enrollees.² However, comprehensive dental services are a mandatory benefit for Medi-Cal (California's Medicaid program) beneficiaries under age 21 and, for adults 21 and over, some dental services are offered at little to no cost, depending on household income and family size.^{6,7} Currently, 39 states across the nation provide basic dental coverage beyond emergency services.⁸

This issue brief provides an overview of oral health disparities among children and adults and efforts by the Biden Administration and the Centers for Disease Control and Prevention (CDC) to mitigate disparities in access to oral health care.

Oral Health Conditions⁹

Cavities (Tooth Decay)	Infectious disease characterized by the gradual demineralization of tooth enamel, resulting in dental cavities.
Periodontal (Gum) Disease	Chronic inflammatory condition affecting the gums and supporting structures of the teeth, characterized by the progressive breakdown of tissues.
Edentulism (Total Tooth Loss)	Condition where an individual has lost all their natural teeth, resulting in the need for dentures or other prosthetic devices.
Cleft Lip and Palate	Congenital condition characterized by an opening or gap in the upper lip and/or roof of the mouth, resulting from the incomplete fusion of facial structures during prenatal development.

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Oral Health Disparities in Children and Adults

Oral Health Disparities in Children Aged 2 to 19^{2,10}

- Research conducted from 2011-2016 has shown that 33% of Mexican American and 28% of non-Hispanic children aged 2 to 5 had cavities in their primary teeth, compared to 18% of non-Hispanic White children. Furthermore, for children aged 12 to 19, nearly 70% of Mexican American children had cavities in their permanent teeth, compared with 54% of non-Hispanic White children.
- Children aged 2 to 5 from low-income households have three times higher prevalence of untreated cavities in their primary teeth and, from ages 12 to 19, children in low-income families have twice the rate of untreated cavities in their permanent teeth compared to their higher-income counterparts.

Oral Health Disparities in Adults Aged 20 to 64^{2,10,11}

- Nearly twice as many non-Hispanic Black or Mexican American adults have untreated cavities as non-Hispanic White adults.
- Adults with less than a high school education are three times as likely to have untreated cavities as adults with at least some college education.

Oral Health Disparities in Adults Aged 65 and Older^{2,10}

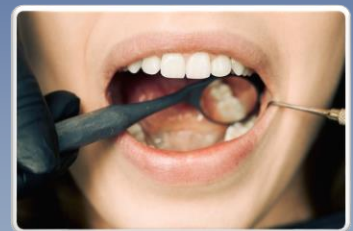
- Older non-Hispanic Black or Mexican American adults have two to three times the rate of untreated cavities as older non-Hispanic White adults.
- Older adults with less than a high school education have nearly three times the rate of untreated cavities than do adults with at least some college education.
- Lower income adults are three times as likely to have lost all their teeth (edentulism) as adults with higher income.

Disparities in Oral Cancer and Gum Disease^{2,12,13,14}

- Head and neck cancers are twice as common among men as women, and the five-year survival rate for oropharyngeal (throat) cancers is lower among Black men (41%) than White men (62%).
- Severe gum disease is most common among adults aged 65 and older, with 42% of adults having some form of gum disease and that rate increases to 60% among adults aged 65 and older.

Oral Health Equity Agenda by the Biden Administration

The Centers for Medicare and Medicaid Services (CMS) recently introduced a proposal that would empower states to designate adult dental services as an essential health benefit (EHB) for health insurance plans purchased on the Affordable Care Act (ACA) marketplaces without imposing annual or lifetime limits on enrollees.^{15,16} Although states will not have to require the coverage, the proposal would reverse the existing ban on states from including dental services as an EHB for adults. Of note, insurers are currently required to offer oral health benefits for kids under 21 through the ACA marketplaces.¹⁶ If finalized, states will have the option to add dental coverage as an EHB starting in 2025.¹⁴



Efforts By the CDC to Reduce Oral Health Disparities

School Sealant Programs

Dental sealants are thin coatings that are painted on the chewing surfaces of the molars to prevent cavities and tooth decay. Sealants protect against 80% of cavities for 2 years and continue to protect against 50% of cavities for up to 4 years.^{17,18} Research shows that children aged 6 to 11 years without sealants have almost three times more molar cavities than children with sealants.¹⁷

Though a plethora of research shows the effectiveness of dental sealants, this effective intervention remains underused among school aged children. Research shows that less than half of children aged 6-11 years have dental sealants and children from low-income families are 15% less likely to get sealants and twice as likely to have untreated cavities. Untreated cavities can cause pain, infection, and problems speaking, learning, and eating.^{10,17}

Funded by the Centers for Disease Control and Prevention (CDC), the School Sealant Programs are an effective approach to provide millions of children who are less likely to receive private dental care with dental sealants to prevent cavities.^{19,20} Furthermore, programs that deliver dental sealants to those who are at high risk for tooth decay also save money as each tooth sealed saves more than \$11 in dental treatment costs.^{19,21} Additionally, providing sealants could prevent more than three million cavities and save up to \$300 million in dental treatment costs.¹⁷

Community Water Fluoridation

For over 75 years, Americans have been drinking water with added fluoride to keep teeth strong and to reduce cavities. Research has shown that water fluoridation reduces cavities by about 25% in children and adults. Although many oral health products, such as toothpaste and mouth rinses, contain fluoride, community water fluoridation has been identified as the most cost-effective method of delivering fluoride to all individuals. By preventing cavities, community water fluoridation has been shown to save money for both the U.S. healthcare system as well as families and celebrated as one of the 10 great public health achievements of the 20th century.^{23,24}

A study conducted in 2020 by the CDC revealed that community water systems that contained fluoride concentrations sufficient to safeguard teeth provided services to over 200 million individuals, constituting more than 70% of the U.S. population.^{23,24} The average lifetime cost per person to fluoridate a water supply is less than the cost of just one dental filling. Additionally, for most municipalities, every \$1 invested in water fluoridation saves at least \$38 in dental treatment costs.^{22,25} As a result of how effective it is, the U.S. has a national goal for over 77% of the population to have water with high enough concentrations of fluoride in their water to prevent tooth decay by 2030.^{23,24}

Conclusion

Oral healthcare is more than just maintaining healthy teeth as it affects an individual's ability to speak, eat, smile, and show emotions. Oral diseases, ranging from cavities to gum diseases, can cause pain and disability for millions of Americans and cost taxpayers billions of dollars each year.²⁶ Therefore, oral health must be included in the provision of healthcare and design of community programs to reduce strain on the public healthcare system.²⁷

Prioritizing oral health at all ages is essential to maintaining one's health and wellbeing and can significantly improve the quality of life. A coordinated effort between environmental, socioeconomic, educational, and health systems is necessary to address these issues to maintain the health and wellbeing of Americans nationwide. It is imperative to recognize and address oral health disparities as a fundamental step towards achieving and sustaining health equity for all.

References

1. <https://www.cdc.gov/oralhealth/conditions/index.html>
2. https://www.cdc.gov/oralhealth/oral_health_disparities/index.htm
3. <https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf>
4. <https://pubmed.ncbi.nlm.nih.gov/21091195/>
5. <https://pubmed.ncbi.nlm.nih.gov/24385661/>
6. https://www.disabilityrightsca.org/publications/dental-services-through-medi-cal#footnote2_dbrs5jq
7. <https://smilecalifornia.org/about/>
8. <https://nashp.org/state-medicare-coverage-of-dental-services-for-general-adult-and-pregnant-populations/>
9. <https://www.who.int/news-room/fact-sheets/detail/oral-health>
10. <https://www.cdc.gov/oralhealth/publications/OHSR-2019-index.html>
11. [https://jada.ada.org/article/S0002-8177\(20\)30672-3/fulltext](https://jada.ada.org/article/S0002-8177(20)30672-3/fulltext)
12. <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2017.html>
13. <https://gis.cdc.gov/Cancer/USCS/#/AtAGlance/>
14. <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2017.html>
15. <https://achesandpainsremedies.com/more-americans-could-get-dental-coverage-under-biden-proposal/>
16. <https://www.axios.com/2023/11/21/aca-obamacare-healthcare-dental-affordable-care-act>
17. https://www.cdc.gov/oralhealth/dental_sealant_program/index.htm
18. <https://www.thecommunityguide.org/findings/dental-carries-cavities-school-based-dental-sealant-delivery-programs.html>
19. https://www.cdc.gov/oralhealth/dental_sealant_program/school-sealant-programs.htm
20. <https://pubmed.ncbi.nlm.nih.gov/27865653/>
21. https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CDCB/Pages/OralHealthProgram/School_Based_School_Linked.aspx
22. <https://www.cdc.gov/fluoridation/index.html>
23. <https://www.cdc.gov/fluoridation/basics/index.htm>
24. <https://www.cdc.gov/fluoridation/statistics/2020stats.htm>
25. <https://www.ada.org/resources/community-initiatives/fluoride-in-water>
26. <https://www.cdc.gov/oralhealth/basics/index.html>
27. https://www.cdc.gov/oralhealth/publications/federal-agency-reports/sgr2000_05.htm
28. <https://omahadentists.net/blog/interesting-teeth-and-dentistry-facts/>



Did you know?

School aged children miss nearly 51 million school hours a year due to dental related illnesses.²⁸



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