

## Division of Oral Health

### At A Glance



CDC's Division of Oral Health (DOH) promotes proven interventions, such as community water fluoridation and dental sealants, to reduce the rate of cavities, especially for populations at highest risk. DOH supports state and territorial oral health programs, collects surveillance data on oral diseases, and develops and promotes adherence to infection prevention and control guidelines for dental health care personnel. The division supports integration of medical and dental care to address other chronic diseases associated with poor oral health. DOH also strengthens the dental public health workforce with a residency training program.



Centers for Disease Control and Prevention  
National Center for Chronic Disease Prevention and Health Promotion

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## What We Do

With an FY 2020 budget of \$19.5 million, CDC's [Division of Oral Health](#) (DOH) focuses on improving oral health and reducing disparities, which are differences in oral health status and access to preventive treatments across different geographic, racial, ethnic, and socioeconomic groups. To meet these goals, DOH works to:



Measure how cavities and other oral diseases affect populations in the United States.



Study interventions to find out and promote what works best to prevent cavities and gum disease.



Fund and guide states and territories to maintain oral health infrastructure, use proven interventions, and evaluate programs.



Share information to help all Americans have better oral health and keep their natural teeth longer.

## Why We Do It

Oral health affects our ability to speak, smile, eat, and show emotions. It affects self-esteem, school performance, attendance at work and school. Oral diseases—which range from cavities to gum disease to oral cancers—cause pain and disability for millions of Americans. One in five US children aged 6 to 11 and one in four adults have untreated cavities. More than 40% of adults have felt pain in their mouth in the last year. On average, 34 million school hours are lost each year because of unplanned dental care, and over \$45 billion is lost in productivity due to untreated dental disease. About 100 million Americans do not have access to fluoridated tap water, and 6 in 10 children do not get dental sealants.



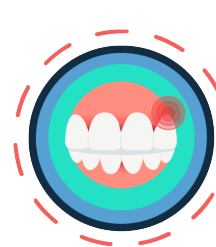
1 IN 5

children aged 6 to 11 with at least one untreated cavity



1 IN 4

adults with untreated cavities



46%

of adults over 30 with signs of gum disease



\$45 BILLION

in lost productivity due to untreated dental disease

# How We Do It

## Collecting Data to Monitor Progress in Oral Health

CDC is the lead federal agency that analyzes data to monitor progress in meeting the [oral health objectives](#) in Healthy People 2030, the nation's agenda for improving the health of all Americans. One of these objectives is to increase the percentage of children, adolescents, and adults who received oral health care in the past year. This objective is also one of 23 high-priority Healthy People 2030 objectives called Leading Health Indicators.

CDC uses a web-based system called [Oral Health Data](#) to bring together data from the National Oral Health Surveillance System and various sources, including state oral health surveys, Behavioral Risk Factor Surveillance System surveys, and biennial water fluoridation surveys. Users can export information into several formats to create tables, charts, and maps.

CDC also helps state health departments collect, interpret, and share local and state data on oral health and the use of preventive services. States and communities use the data to monitor their progress in meeting their oral health objectives and set program priorities to reach people with the greatest needs.



## Examples of Our Impact

- ▶ The National Health and Nutrition Examination Survey (NHANES) measures how many children aged 6 to 11 have cavities and dental sealants. In 2011–2016, NHANES found that fewer than 4 in 10 low-income children got dental sealants. Low-income children are almost 15% less likely to have dental sealants and twice as likely to have untreated cavities as higher-income children.
- ▶ States use CDC's [Water Fluoridation Reporting System](#) to monitor the quality of their water fluoridation programs. CDC recognizes those public water systems that meet optimal fluoridation level goals with annual quality awards.

## How We Do It



### Promoting Community Water Fluoridation to Reduce Cavities

Community water fluoridation is recognized as one of 10 great public health achievements of the 20th century. Even with the widespread use of products with added fluoride, like toothpaste, studies have found that people living in communities with water fluoridation have 25% fewer cavities than those living in communities without fluoridation.

CDC works with state and national partners to improve water fluoridation quality by training state drinking water system engineers and oral health and other public health staff. In 2019, DOH released a new web-based, interactive training called [Fluoridation Learning Online](#) (FLO).

CDC also manages a web-based reporting system that helps states monitor the quality of their water fluoridation programs. The public component of this database, [My Water's Fluoride](#), allows residents in participating states to learn the fluoride content of their public water system.

In 2018, CDC and the National Association of County and City Health Officials developed a [fluoridation communications tool kit](#) to help public health professionals, water system operators, and civic leaders educate community members about the benefits of community water fluoridation.

### Examples of Our Impact

- ▶ CDC is working toward the Healthy People 2030 objective of 77.1% of the population being on community water systems that have optimally fluoridated water. Fluoridation of public water systems increased from 62.1% in 1992 to 73.0% in 2018.
- ▶ On average, every \$1 spent to fluoridate a community water system saves about \$20 each year from treating fewer cavities.

# How We Do It

## Promoting School Sealant Programs to Prevent Cavities

One in five children aged 6 to 11 years has at least one untreated cavity, which can lead to problems eating, speaking, and learning. Dental sealants protect against 80% of cavities for 2 years and continue to protect against 50% of cavities for up to 4 years. Children aged 6 to 11 years without sealants have almost 3 times more first molar cavities than children with sealants.

Sealant use increased by about 75% among low-income children and remained at about 43% among higher-income children from 1999–2004 to 2011–2016. However, this effective intervention remains underused; less than half of children aged 6 to 11 have dental sealants.

[School sealant programs](#) provide dental sealants at no charge to children who are less likely to receive private dental care. These programs provide sealants at school during the school day using mobile dental equipment. CDC provides guidance to state and community programs to help them plan, set up, and evaluate school sealant programs and to complement services provided by private dentists. CDC also created [SEALS](#), a tool that allows state and local programs to evaluate the effectiveness of their sealant programs.



## Examples of Our Impact

- ▶ School sealant programs that are delivered to children at high risk of tooth decay can be cost-saving for Medicaid after 2 years.
- ▶ Applying sealants in schools to the nearly 7 million low-income children who don't have them could prevent more than 3 million cavities and save up to \$300 million in dental treatment costs.

## How We Do It

### Preventing Infections in Dental Care Settings Through Guidelines and Training

Dental health care settings must meet the same high standards for infection prevention and control as any medical setting. To help reduce the risk of disease transmission, CDC develops recommendations to guide infection prevention and control practices in all settings in which dental treatment is provided.

In 2016, CDC published the [Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care](#). This resource includes current recommendations from CDC and a checklist to measure compliance. The recommendations guide infection prevention practices in dental offices nationally and globally and provide direction for dental health care personnel.

In 2017, CDC released a new mobile app called [CDC DentalCheck](#) to support implementation of these recommendations. Dental health care personnel can use the app to assess practices in their facility and make sure they are providing safe care. In 2018, CDC created a complementary 10-module training slide series called [Basic Expectations for Safe Care Training Modules](#).



### Examples of Our Impact

- ▶ CDC's *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care* has been downloaded over 18,000 times, making it one of the most popular CDC resources.
- ▶ CDC DentalCheck is available on Android and iOS devices and has been downloaded more than 10,000 times.

# How We Do It

## Supporting Programs and Partners to Improve Oral Health

CDC provides [20 states and 1 territory](#) with funds, technical assistance, and training to build strong oral health programs. This support helps grantees promote oral health, monitor oral health behaviors and problems, and conduct and evaluate prevention programs. It also helps grantees better coordinate and manage community water fluoridation programs and school dental sealant programs and develop ways to better integrate dental and medical care.

CDC funds two national partners to support these efforts—the Association for State and Territorial Dental Directors (ASTDD) and the National Association of Chronic Disease Directors (NACDD). ASTDD provides assistance and resources to grantees and assesses all state programs. NACDD supports integration of oral health programs with other chronic disease programs.

DOH also works with other chronic disease programs to promote prevention strategies designed to reduce risk factors associated with multiple chronic conditions, including gum disease. In addition, CDC works to produce skilled specialists in dental public health through its [Dental Public Health Residency Program](#).



## Examples of Our Impact

- ▶ The Maryland Department of Health and Mental Hygiene used CDC funding to add screening, counseling, and referral for high blood pressure to existing oral health programs. Staff worked to raise patient awareness about the relationship between oral health and overall health, including the connection between oral health and high blood pressure.
- ▶ The Georgia Department of Public Health used CDC funding to educate oral health providers, obstetricians/gynecologists, and pregnant women about the effects of tobacco exposure on mothers and babies. Georgia's Oral Health Program developed a tool kit and trained 62 oral health providers and health department staff on the Ask, Advise, and Refer model for tobacco cessation, leading to a 20% increase in quitline callers who reported being referred by an oral health provider.

CDC's National Center for Chronic Disease Prevention and Health Promotion prevents chronic disease and promotes health for people of all ages.



IMPROVING  
QUALITY OF LIFE

INCREASING HEALTHY  
LIFE EXPECTANCY

REDUCING HEALTH  
CARE COSTS

## We Work to Improve Health Across the Life Span

### Where People Live, Learn, Work, and Play



#### Infants

Reduce the leading causes of infant death and illness.



#### Children and Adolescents

Help support healthy communities, child care programs, and schools so children can eat well, stay active, and avoid risky behaviors.



#### Adults

Help adults lead healthy and active lives and increase the use of preventive services like cancer screenings.



#### Older Adults

Promote quality of life and independence for people as they age.

### For more information, contact

Centers for Disease Control and Prevention  
National Center for Chronic Disease Prevention and Health Promotion

[Division of Oral Health](#)

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Contact [CDC-INFO](#)

January 2021