

ORAL HEALTH RESEARCH IS A PUBLIC HEALTH RESPONSIBILITY

Oral health research discoveries, such as fluoride in water and dental sealants, have already led to a precipitous drop in tooth decay among children and better oral and overall health for more Americans. But we still have a long way to go in order to combat rising disparities in oral health outcomes. Fortunately, federal agencies, such as the National Institute of Dental and Craniofacial Research (NIDCR) and the Centers for Disease Control and Prevention (CDC), are supporting research and programs that can lead to better overall health and well-being for all Americans.

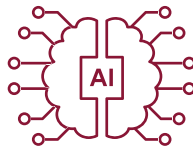
NIDCR-FUNDED RESEARCH LEADING TO BETTER ORAL AND OVERALL HEALTH

NIDCR supports a diverse research portfolio spanning basic to translational and clinical research. The Institute's many research initiatives reveal its contributions to the nation's health. Below are some examples of how NIDCR is benefitting both individuals and society:



Accelerating Disease Diagnostics

NIDCR supports research into salivary diagnostics, which tests for biomarkers in saliva samples to quickly, accurately, and safely test for a variety of diseases and conditions, such as HPV-related oral cancer and Zika virus. The research has also been used to create wearable oral sensors that monitor stress hormone cortisol.



Using AI to Diagnose Cancer

NIDCR funded scientists used deep learning, a type of artificial intelligence, to detect the presence of molecular and genetic alterations based only on tumor images across multiple cancer types. The approach could make cancer diagnosis faster and less expensive and help clinicians deliver earlier personalized treatment to patients.



Advancing Regenerative Medicine

Regenerative medicine harnesses the body's growth and healing properties to repair or replace damaged cells, tissues, or organs. NIDCR has invested roughly \$82 million to develop evidence-based regenerative medicine therapies, such as micro-engineering blood vessels and building bone from scratch.

CDC COMMUNITY PROGRAMS SUPPORT CHILDREN'S ORAL HEALTH

The CDC works with a number of partners to promote oral health through public health interventions. One successful example is the CDC's school dental sealant programs, which provide sealants to children at school during the school day using mobile dental equipment. This effort focuses on schools that serve children at high risk of cavities and children who are unlikely to receive sealants in a private dental office setting. Working alongside state and community programs, CDC also provides guidance to help them plan, set up, and evaluate school dental sealant programs and complement services already provided by dentists.

Cavities

