Protecting Precious Smiles: How States Prevent Oral Diseases and Curb Costs

Although many oral diseases—from cavities to cancer—are preventable, they cause pain and disability for millions of Americans every year. That’s the bad news. But according to public health experts like the Centers for Disease Control and Prevention’s (CDC) Dr. Scott Presson, Illinois State Dental Director Dr. Lewis Lampiris and Arkansas dentist and state legislator Tommy Roeback, there are a number of effective prevention strategies that can be used to promote oral health and combat disease. And that’s the good news for state policymakers seeking ways to reduce the burden of oral diseases and curb spiraling health care costs.

The Burden and Cost of Oral Disease

According to Dr. Presson, Team Leader: Prevention Services and Dental Officer at CDC, it makes sense for state public health champions to promote oral health. Considers Presson says, some of the human and financial burdens imposed by oral disease:

• Americans spent an estimated $78 billion on dental services in 2004.
• Children lose an estimated 50 million school hours a year to dental-related illnesses, with low-income children losing 1.2 times more days a year than children from higher income families.
• Adults lose an estimated 164 million hours of work every year because of preventable dental problems.
• Although preventable, tooth decay remains the most common chronic disease for children age 5 to 17.

• Oral and pharyngeal cancers will affect an estimated 29,370 in 2005.

Additionally, emerging research links oral disease with potential impacts on chronic diseases such as diabetes, heart disease and preterm low birth weight deliveries. And, there is a growing body of research describing the adverse psychological-social effects of poor oral health. Children with some types of oral disease, for example, often have difficulty eating, speaking and paying attention in school. Missing or unsightly teeth among adults can be embarrassing and may lead to difficulty securing employment in our increasingly service-oriented labor market.

Disparities Add to Burden

The burden of oral disease for some groups of Americans is exacerbated by income and racial disparities. For example, poor children and adolescents have more untreated decay than children from families with higher incomes. African-American and Mexican-American children age 2-4 have a higher occurrence of decay in their primary (baby) teeth than white children.

According to data from 2002, Americans 65 or older living in certain states in the South and Southwest (Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Tennessee and West Virginia) are much more likely to lose all their teeth than their peers in states like California, Hawaii, Oregon and Minnesota. These differences show the potential of prevention efforts.

Issues surrounding health insurance coverage and access to treatment help generate many of these disparities. According to the CDC, fewer than 20 percent of Medicaid-covered children received at least one preventive dental service in a year. In many
states, Medicaid-eligible adults only have access to emergency dental services.10

Proven Prevention, Cost-Saving Strategies

Despite its heavy human and financial toll, oral disease is mostly preventable, and there is strong evidence to support particular public health interventions and strategies. “We have good evidence that prevention works,” Presson says. “Our mainstays in community-based approaches are water fluoridation and dental sealants.”

Water fluoridation. Nearly 170 million Americans, or 67 percent of the population with access to public water supplies benefit from fluoridated water.11 Children in communities with water fluoridation experienced 18-40 percent fewer cavities.12 According to CDC estimates, every dollar spent on community water fluoridation saves $38 in treatment costs.12

Dental sealants. Children receiving dental sealants in school-based programs have 60 percent less decay in back teeth for two to five years after a single application. The school-based programs are cost-saving when delivered to populations at high-risk for tooth decay, such as children from low-income families.13

What are dental sealants?
Dental sealants are a plastic coating applied to the chewing surfaces of back teeth. They are a safe, effective way to prevent cavities among school-aged children.

Comprehensive State Oral Health

Another key strategy for preventing oral diseases—and improving access to treatment—is creating a comprehensive state oral health program. That’s according to Dr. Lewis Lampins, director of the Illinois Department of Public Health’s Division of Oral Health, who has been running such a program for eight years—long enough to see the power of the comprehensive approach to generate positive change.

Lampins says the essential elements of a comprehensive state oral health program include:

• aggressive leadership and expertise in oral and public health in the state health department;
• an oral health surveillance system to evaluate and monitor oral diseases;
• population-based interventions to prevent decay and other diseases and to treat them effectively when they appear;
• education, training and technical assistance to support oral health programs in schools, neighborhoods and local communities; and
• a state oral health improvement plan that identifies the key issues and develops effective strategies to address them. “The state plan puts everyone on the same page,” Lampins says, highlighting the importance of a statewide plan that’s developed and supported by a broad coalition of public health stakeholders.

In Illinois, where a comprehensive oral health plan was developed 10 years ago, 11.5 million residents receive the benefits of fluoridated water and 27 percent of children in third grade have at least one dental sealant. According to Lampins, the plan—backed by a statewide oral health coalition of public...
health dental clinic directors and local health department administrators—has changed the policy climate in the state. Recent changes have included streamlining Medicaid reimbursement procedures for dentists to increase their rate of participation in the program and passing legislation that allows for the general supervision of dental hygienists—a change that expands the number of people able to receive regular basic dental care.

Lampins said he sees promising trends for the near future in Illinois, including the integration of oral health with primary health—a trend that will be especially beneficial for efforts in preventing dental problems in young children. “Think about it,” Lampins says. “It’s most often physicians and pediatricons who come in contact with pregnant women, infants and toddlers, so it makes sense that we begin to look at using these health care providers to give parents guidance about how to prevent tooth decay and to train them to screen kids for oral health problems and to refer them to dentists.”

Putting Oral Health on the Map

As another example to illustrate that a comprehensive approach to fighting oral disease can make a big difference, Arkansas Rep. Tommy Roeback—a practicing dentist—offers his own state’s recent experience in passing Act 785, a 2001 initiative that created an office of oral health within the health department.

The legislation created a permanent office of oral health and gave the director of the new office enhanced authority to plan, direct, and coordinate oral health education and preventive programs in Arkansas. The legislation required that the new director be a dentist with a strong public health background and that’s exactly the kind of person Arkansas hired.

“With the new office and under the leadership of the director, we’ve seen tremendous increases in oral health initiatives throughout the state,” Roeback says, referring to Dr. Lynn Maunder, Director, Office of Oral Health, Arkansas Department of Health and Human Services.

According to Roeback, one of Maunder’s main accomplishments so far has been the creation of an effective statewide coalition of oral health stakeholders—a coalition that now has more than 60 active participants representing state health agencies, social service agencies, dentists, dental hygienists and consumers.

In turn, that coalition has been instrumental in advancing oral health policy in Arkansas.

As an example, Roeback points to 2003 Act 1216, which creates a K-12 oral health curriculum aimed at establishing beneficial lifelong oral health habits. Another effort—a bill to fluoridate all communities in the state with populations of 5,000 or more—failed this year, but attracted widespread support and will likely be reintroduced soon. Roeback boasts that Arkansas, which earned only a “C minus” from the non-profit Oral Health America report card in 2001, has earned an “A” this year for its enhanced oral health efforts. Oral Health America, based in Chicago, Illinois, is a national, independent organization dedicated to improving oral health for all Americans.

Advice for Oral Health Champions

When asked what he’d tell legislators in other states about how to become champions for oral health, Roeback said he’d advise them to start by finding answers to some basic questions:

- Are the citizens of your state, district, getting adequate dental care?
- Is access to dental care a concern?
- Does your state provide adequate Medicaid funding for dental services?
- Does your state have an oral health plan?
- Does your state have an organized coalition of oral health stakeholders?

Your state health department’s oral health program director can answer many of these questions as can the state dental associations. Roeback says, “And your personal dentist, too, is a tremendous resource. Utilize the resources available to you. The dental community is eager to help.”

Key State Prevention Efforts

- Increasing community water fluoridation
- Dental sealants for school-aged children
- Health education to promote use of preventive fluoride products
- Reducing tobacco use
- Improving access to regular dental care

Source: CDC

The Burden of Oral Disease

- Over 50 percent of 6 to 11 year-old children have at least one cavity or filling, and that proportion increases to 78 percent among 17-year-olds.
- Low-income children are hardest hit by tooth decay; about one-third of children age 2 to 11 have untreated decay in their primary teeth; 1 in 5 low-income children and adolescents age 6 to 19 has untreated decay in their permanent teeth.
- Untreated cavities may cause pain, dysfunction, absence from school, overweight and poor appearance—problems that can greatly reduce a child’s capacity to succeed in life.
- One-quarter of adults over age 60 have lost all of their teeth primarily because of tooth decay, which affects over 90 percent of all adults, and advanced gum disease, which affects about 1 in 7 adults.
- Tooth loss has more than cosmetic effects—it may contribute to nutrition problems by limiting the types of food that a person can eat.

Source:


Healthy States Brief: Oral Health

October 2005
healthy states brief: oral health

Volume 1, Number 4

Healthy States Briefs highlight trends and promising practices in state public health policy. The Healthy States Initiative is a partnership among The Council of State Governments, the National Black Caucus of State Legislators and the National Hispanic Caucus of State Legislators. The initiative is supported by the Centers for Disease Control and Prevention.

This Healthy States Brief on oral health was written by Dan Lorenz, a health policy analyst at The Council of State Governments. He can be reached at dlorenz@csg.org.

The Council of State Governments
PO Box 11910 • Lexington, KY 40579-1910
phone (859) 241-3800 • fax (859) 241-3801
www.healthystates.csg.org

Funding for this issue of Healthy States Initiative is provided by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, under Cooperative Agreement U38CCU204234-1. The contents of this Healthy States Brief are the responsibility of CSG’s Healthy States Initiative and do not necessarily represent the official views of the CDC or CSG.

healthy states brief

The Council of State Governments
PO Box 11910
Lexington, KY 40579-1910
www.healthystates.csg.org

resources

- CDC’s Oral Health Web site
  www.cdc.gov/oralhealth
- Healthy States’ Oral Health Web page
  www.healthystates.csg.org/Public Health-States/Oral Health
- Association of State and Territorial Dental Directors (ASTDD)
  www.astdd.org
- ASTDD’s “Building Infrastructure & Capacity in State and Territorial Health Programs”:
  www.astdd.org/docs/infrastructure.pdf
- American Dental Association
  www.ada.org
- National Maternal and Child Oral Health Resource Center
  www.mchoalth.org
- Oral Health America
  www.oralthemeros.org

Nonprofit Organization
U.S. Postage
PAID
Lexington, KY 40578
 Permit No 355

Notes