Introduction

The mouth is our primary connection to the world. It is how we take in water and nutrients to sustain life, our primary means of communication, the most visible sigh of our mood, and a major part of how we appear to others.

Oral health is an essential and integral component of overall health throughout life and is much more than just healthy teeth. Oral refers to the whole mouth, including the teeth, gums, hard and soft palate, linings of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. Not only does good oral health mean being free of tooth decay and gum disease, but it also means being free of chronic oral pain conditions, oral cancer, birth defects such as cleft lip and palate, and other conditions that affect the mouth and throat. Good oral health also includes the ability to carry on the most basic human functions such as chewing, swallowing, speaking, smiling, kissing, and singing.

The mouth is an integral part of human anatomy and plays a major role in our overall physiology. Thus, oral health is intimately related to the health of the rest of the body. For example, mounting evidence suggests that infections in the mouth such as periodontal (gum) diseases may increase the risk of heart disease and may complicate control of blood sugar for people living with diabetes. Studies are not conclusive but continue to look at possible relationships between periodontal disease and adverse pregnancy outcomes.

Conversely, changes in the mouth often are the first signs of problems elsewhere in the body, such as infectious diseases, immune disorders, nutritional deficiencies, and cancer. Oral Health is an issue for persons of all ages, races, and geographic locations.
The burden of dental disease is far worse for those who have restricted access to prevention and treatment services. To address the threat of dental disease in an effective manner, the Office of Oral Health (OOH), Arkansas Department of Health (ADH) recognized that a state Oral Health Plan was needed. The Oral Health Plan for Arkansas was first developed from recommendations at the Governor’s Oral Health Summit, held in Little Rock on February 23, 2002. Funded by the Centers for Disease Control and Prevention (CDC), the Summit was an effort by OOH and the Arkansas Oral Health Coalition to bring together health care professionals, policy makers and other citizens to address oral health issues in our state. Breakout sessions gave Summit attendees the chance to work in the various subject areas to address barriers, identify strengths and develop goals. Working in facilitated small groups, the attendees provided input to the Summit for the draft Oral Health Plan. The Arkansas Oral Health Plan is the culmination of the work of the entities listed on page 6. Coalition members reviewed and made changes to the draft Plan throughout the spring of 2002 and approved its content in June 2002. The Plan was updated in 2004, in 2005, in 2009, and 2012.

Purpose and Use

In 2002, the Arkansas State Oral Health Plan was written to outline a series of initiatives in four focus areas to facilitate progress towards stakeholder recommendations. The state’s oral health recommendations reflected the knowledge and emerging priorities at that time.

This plan outlines a series of recommendations and strategies to promote oral health in Arkansas. The steps involve federal, state, and local initiatives. The plan focuses on education, access, prevention, and policy.

The proposed recommendations will be accomplished by increasing awareness of the importance of oral health among the individuals who are most adversely affected by poor oral hygiene: i.e., the poor, the least educated, and racial and ethnic minorities.
ADH is a unified health department, with a main office in Little Rock and 94 local health units in each of the State’s 75 counties. The Office of Oral Health (OOH) was established within the Arkansas Department of Health in 1999.

The vision for the Office is “optimum oral health for every citizen of Arkansas”. To that end, the OOH provides resources and support for counties, communities, neighborhoods, schools, and professional groups to address oral health needs and disparities.

The mission of the OOH is to allow all Arkansans to enjoy optimum oral health. Working with the public health functions of assessment, policy development and assurance, and also through education, prevention and access, the OOH strives to improve oral health throughout the state.

Programmatic activities benefit children, adults, the elderly and those with special needs.

The OOH continues to collaborate with and receive strong support from the Arkansas General Assembly and the leadership and administration of the ADH. Internal partnerships within the ADH include the Pregnancy Risk Assessment Monitoring System (PRAMS), Behavioral Risk Factor Surveillance System (BRFSS), Tobacco Prevention and Cessation Program, Infection Control Committee, Chronic Disease Coordinating Council, Chronic Disease Forum, Heart Disease and Stroke Prevention Coalition, and the Clinician’s Committee and Science Advisory Committee. The University of Arkansas for Medical Sciences (UAMS) College of Public Health has provided significant input in areas relating to epidemiology and evaluation.

External partnerships include the Arkansas Oral Health Coalition (AOHC), the Arkansas Cancer Coalition, the Arkansas State Board of Dental Examiners, the Arkansas State Dental Association (ASDA), the Arkansas State Dental Hygienists’ Association (ASDHA), and the UAMS Center for Dental Education. All are integral to our mission.

OOH is also active on the national level with alliances among the Association of State and Territorial Dental Directors (ASTDD), the American Association of Public Health Dentistry, Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA).

The mission of the Office of Oral Health is to promote life-long optimum oral health through primary prevention at the community, healthcare professional and family levels; through accessible, comprehensive and culturally competent community-based oral health care provided through a variety of financing mechanisms; thorough educational opportunities throughout life that will allow individuals make better decisions for their health; and through informed compassionate policy decisions at all levels of government.
The Oral Health Coalition began in 2001 as the Arkansas team at the National Governor’s Association (NGA) Policy Academy on Improving Oral Health Access for Children. The academy team consisted of seven individuals representing Governor Mike Huckabee’s Office, the Arkansas General Assembly, the Office of Oral Health, the Division of Medical Services, the Arkansas State Dental Association, the Arkansas State Dental Hygienists’ Association, and BHM International, Inc. The team worked with a faculty of national experts to develop Arkansas’ oral health goals in access, education, prevention and policy. To continue the academy’s efforts, the team invited other interested parties and expanded over the subsequent 10 months to what is now the Arkansas Oral Health Coalition. The Coalition has adopted the slogan “SMILES: AR, U.S” its mission reflects that of the Office of Oral Health.
Past Accomplishments

Below is a list of accomplishments that have been achieved since the first State Oral Health Plan. The focus areas include Education, Access, Prevention, and Policy.

**Education**

- Delta Dental Plan of Arkansas provided a comprehensive elementary school curriculum to every elementary school in the state. In collaboration with that effort, the Office of Oral Health (OOH) planned a series of the train-the-trainer seminars for school nurses and health room volunteers on appropriate use of the materials.
- OOH and the Dental Health Action Team have created and broadcasted PSA’s on dental sealants and water fluoridation.
- OOH was awarded a $5,000 grant from the Association of State and Territorial Dental Directors to conduct a series of Head Start/Early Head Start Oral Health Forums. These forums, conducted in 2003, were used to develop policies and materials for Head Start staff, children and families.
- OOH worked with Community Health Centers of Arkansas to provide the Bright Smiles, Bright Futures educational materials to pregnant women and new mothers, on the importance of oral health.
- OOH, in cooperation with Partners for Inclusive Communities and community health centers, continues to provide in-service education for those professionals treating patients with disabilities.
- The 2003 Governor’s Oral Health Summit (June 14, 2003) focused on oral health and its impact on general health. One presenter discussed the connection between periodontal disease and pre-term, low birth-weight babies. The audience consisted of advocates, dental hygienists, dentists, nurses, and physicians.
- The 2004 Governor’s Oral Health Summit (June 12, 2004) provided continuing education on dentistry’s response to bioterrorism, oral health and pregnancy, and increasing access in states lacking a dental school.
- The 2005 Governor’s Oral Health Summit provided continuing education on oral/pharyngeal cancer and tobacco cessation.
- The 2007 Governor’s Oral Health Summit presented information about methamphetamine use from legal, legislative, policy and clinical aspects.
The 2010 Governor’s Oral Health Summit addressed the tobacco health threat, workforce issues and family violence

The 2012 Governor’s Oral Health Summit addressed access to care issues

The Arkansas Oral Health Coalition supported a legislative initiative presented by the Arkansas Academy of General Dentistry to increase oral health literacy through mandatory oral health education in elementary schools. Legislation was passed as Act 1216 of 2003. Members of the Arkansas Oral Health Coalition working with the Arkansas Department of Education promulgated the new curriculum in 2003.

OOH, in cooperation with the Arkansas Oral Health Coalition, brought “Body Walk” to Arkansas. Body Walk, a portable interactive exhibit, has traveled throughout Arkansas over the last several years. The exhibit gives students the chance to travel through the “body” and contains a major focus on oral health.

The Office of Oral Health provided an Arkansas specific map of fluoridated communities (both natural and adjusted) to every dentist, dental hygienist, pediatrician and family practice physician in Arkansas. The cover letter explained the importance of fluoridation, how to properly prescribe fluoride supplements and how to initiate water fluoridation in communities and water districts.

In 2003, the Coalition helped pass legislation, Act 1215, which authorized the development of the revised Health and Physical Fitness Curriculum, mandating oral health education in public and private schools, ages k – 12. A comprehensive oral health education curriculum for elementary and secondary students was designed.

The Coalition received funding from the Head Start Oral Health Initiative to support the Governor’s Oral Health Summit as a means of recruiting dentists and dental hygienists to help with the Head Start Programs’ Dental Initiatives.

Access

The Dental Services Project completed a clinical survey of ambulatory adults with developmental disabilities, and a paper survey of patients and their caregivers to help develop policy to increase access for this special population.

For the last five years, Healthy Connections, Inc., has partnered with University of Arkansas Fort Smith to incorporate the dental sealant program into the dental hygiene curriculum. A partnership with Western Arkansas Total Community Health (WATCH) allows the children to receive services at the clinic.

Under the CDC cooperative agreement, the Office of Oral Health

- created a state oral health surveillance system
- hired a 0.50 FTE epidemiologist for oral health
- completed an expanded statewide oral health survey of third-grade students in early 2002
- conducted a county-specific survey of 7000 students in 2003 and 2004 and 2010
- Conducted a Brief Screening Survey (BSS) of Older Adults in 2012
In addition, the Office conducted two adult oral health surveys during May-June 2002. A statewide, random-sample telephone survey was conducted in collaboration with University of Arkansas—Little Rock (UALR). A paper survey of adults was conducted in cooperation with Community Health Centers of Arkansas, Inc. and their 49 clinical sites.

The OOH, in cooperation with ASDHA, conducted a workforce survey of dental hygienists.

In 2012, OOH conducted a statewide oral health survey in randomly selected long-term care facilities across the state using the BSS developed by ASTDD.

The Office of Oral Health received a 3-year Oral Health Workforce Development grant from Health Resources and Services Administration (HRSA) to promote dental careers in underserved areas, promote dental careers among minority college students and rural high school students, educate providers about family violence prevention, and educate non English-speaking patients about the availability of free translation services.

The Coalition was active in helping to secure an increase in Medicaid payments so that dentists can now cover their costs plus a reasonable measure of profit.

In 2011, the Coalition backed legislation allowing the creation of collaborative practice dental hygiene.

Through a HRSA Workforce Grant, the Coalition working with OOH and the University of Arkansas for Medical Services (UAMS) have established a center for dental education. A dental residency program is in the planning stages.

The Coalition was instrumental in the establishment of the ConnectCare program, a statewide program established to connect Medicaid patients with their doctors. The ConnectCare dental program can 1) Find a Medicaid dentist in ones area, 2) Schedule dental appointments, 3) Assist with transportation 4) Remind the patient of appointments, and 5) Reschedule missed appointments.

OOH in cooperation with the Oral Health Coalition worked for the expansion of the Medicaid dental program to include adults and pregnant women. Medicaid was expanded by action of the 2009 General Assembly with funding from increased tobacco taxes.

Prevention

UALR Share America in partnership with 14 organizations designed the Future Smiles Program; an initiative that annually provides 2,500 dental screenings, 250 sealants, and oral health education for families. To provide parents with important information about sealants, Share America developed an education sealant brochure for parents in the Little Rock School District. Next steps included the opening of a school-based dental clinic at Wakefield Elementary, which has been in continuous operation since the fall of 2004.

Healthy Connections, Inc. has provided oral cancer screenings for children at WATCH Center with Stamp Out Smoking (SOS) grant funding. WATCH also conducts oral health screenings for youth playing sports.

Additional communities have passed fluoridation ordinances or resolutions, including Dardanelle, Ashdown, Rector, Monticello, Paris, Perryville, McGehee, Dumas, Bigelow, Harrisburg and El Dorado. Fluoridation equipment for new fluoridating communities is now funded in part by grants from the Delta Dental of Arkansas Foundation.
The OOH developed and aired radio Public Service Announcements on dental sealants and fluoridation.

Through a grant from the Daughters of Charity Foundation, OOH led the Seal-the-State initiative promoting dental sealants and providing sealants in school-based clinics across the state.

In 2010, Arkansas Children’s Hospital (ACH) adopted the Seal-the-State sealant program and is bringing sealants to underserved children across the state.

In 2012, the Coalition was instrumental in passing a bill guaranteeing access to fluoridated water for Arkansans living in areas where water systems served more than 5,000 people.

In 2012, the Coalition was instrumental in passing legislation allowing physicians to apply fluoride varnish to children’s teeth at well-baby checkups.

Policy

Arkansas State Board of Dental Examiners amended Article XI of the Rules and Regulations expanding general supervision for hygienists.

Arkansas State Board of Dental Examiners approved changes to the Rules and Regulations on infection control in dental settings.

A legislative initiative presented by the Arkansas Academy of General Dentistry passed increasing oral health literacy through mandatory oral health education in elementary schools.

The Coalition approved Bylaws and incorporated under Arkansas state law, and was designated by the IRS as 501(c)(3) status.

The Arkansas Oral Health Coalition has grown to 45 members representing widely diverse organizations and agencies.

OOH has funding to support the Governor’s Oral Health Summits. The summit also serves as the annual meeting for the Coalition.

In 2010, the Coalition sponsored a Policy Tool Workshop attended by approximately 30 stakeholders and advocates from across the state with the goal of establishing five strategies for improving the oral health of Arkansans.

In 2011, three major legislative oral health bills were supported and passed addressing oral health issues: fluoridated water, collaborative practice dental hygiene, and fluoride varnish application by physicians and nurses.
Oral health is an essential part of optimal health for all Arkansans – and is much more than healthy teeth. *Oral* refers to the whole mouth – the teeth, gums, hard and soft palate, linings of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. Oral health means being free of cavities and gum disease, but it also means being free of chronic oral pain conditions, oral cancers, birth defects such as cleft lip and palate, and other conditions that affect the mouth and throat.

“Dental care is the greatest unmet need among children,” the Pew Foundation declares. However, oral health is an issue for persons of all ages, races, & geographic locations:

**OVERVIEW**

- 64% of third grade students in Arkansas have caries experience.
- 29% of third grade students in Arkansas have untreated decay.
- White third grade students were nearly twice as likely (1.8) to have dental sealants on at least one tooth compared to Black third grade students.
- 65% of oral/pharyngeal cancers diagnosed in males during 1997-2009 had spread to nearby tissues or to more distant sites.
- 23% of adults aged 65 and older have no natural teeth present.
- Among adults aged 65 and older in nursing homes and Area Agency on Aging Centers in Arkansas, Black older adults were 2.6 times more likely to have periodontal disease than white older adults.
- Smokeless tobacco use has been increasing since 2002. The percent of smokeless tobacco use among adults in 2002 was 5.1% compared to 8.5% in 2010.
- 61.1% of adults had at least one dental visit in the past year.
- Adults with a college education were twice as likely (2.2) to have visited a dentist in the past year compared to adults with less than a high school education.
The Arkansas Burden of Disease

**Adults**

In Arkansas, 54 percent of adults aged 18 and older had at least one tooth extracted due to decay or gum disease in 2010. In contrast, 44 percent of U.S. adults had at least one tooth extracted due to decay or gum disease in 2010.

Furthermore,

About 28 percent of adults between the ages of 35 and 44 participating in the 2004 National Health and Nutrition Examination Survey had untreated caries.

**Children/Adolescents**

The most comprehensive data on children were collected in 2010, when the Arkansas Department of Health’s Office of Oral Health along with its partners screened 4,239 children enrolled in public schools throughout the state.

Results indicated that:

- 64% had evidence of current or past cavities (caries experience);
- 29% had untreated caries (cavities);
- 27% were in need of routine care; and
- 4% needed urgent dental care.

**Older Adults**

The most comprehensive data on older adults were collected in 2012, when the Arkansas Department of Health’s Office of Oral Health conducted a BSS screening survey on 2,723 older adults living in Nursing Homes or visiting Area Agency on Aging facilities.

- A significant proportion of older adults were missing five or more teeth
- Female respondents were more likely to have all their natural teeth missing as compared to males
- Overall, 5.0% of the participants had evidence of a suspicious soft tissue lesion that needed care
- Of those screened, 12.2% had evidence of severe dry mouth
- Overall, 43.6% of older adults with teeth had untreated dental caries
- Over 20% of all participants were in need of early or urgent dental care
- Among those with teeth:
  - 15.8% had some evidence of substantial oral debris
  - 8.6% had some evidence of severe gingival inflammation
  - 32.0% had some indication of root fragments
  - 12.3% were in need of periodontal care
Oral Cancer

Oral cancer is a serious disease. Only approximately 62.8% of the newly diagnosed cases survive for 5 years after diagnosis. Mortality is nearly twice as high in African-American males compared to white males. Methods used to treat the cancers (surgery, radiation, chemotherapy) are disfiguring and expensive. Avoiding high-risk behaviors— including smoking, using smokeless (spit) tobacco, and excessive alcohol use—are critical to preventing oral cancer. Early detection is the key to successful treatment and reducing the burden associated with oral cancer.¹¹

During the years 1997 through 2008, the Arkansas Cancer Registry recorded:

- 4,066 new cases of oral or pharyngeal cancer, or 11.5 new cases per 100,000 persons.
- 38% were identified at the earliest stages (in situ or localized), while
- The majority (54%) had spread to close tissue or to more distant sites before diagnosis.⁴

Oral Cancer Mortality Rates

Over the last decade, mortality rates for oral and pharyngeal cancers have remained stable at approximately 3 deaths per 100,000 persons (after accounting for age differences across years).

Cancer of the Oral Cavity and Pharynx

Since 2001, there has been a gradual increasing trend in the incidence of oral cavity and pharynx cancers in Arkansas. Recent studies have shown that incidence of oral cancer is rising because of the high prevalence of human papillomavirus (HPV) infection among white males under the age of 50. HPV infection is associated with cancers of the tonsil, base of tongue, and may contribute to almost 20% to 30% of all oral cancers diagnosed. In Arkansas, the majority of oral cancers occur on the tongue and tonsil.

Approximately 4,066 Arkansans were diagnosed with oral cavity and pharynx cancers during 1997 – 2008, and 963 died of the disease from 1997 – 2007.

In the U.S., oral cancers are twice as common in men as in women. In Arkansas, men were nearly three times more likely to be diagnosed with oral cancer than women, 17.6/100,000 for men and 6.3/100,000 for women.

The higher incidence among men may be attributed to the increases in risk factors associated with oral cancers; smoking, use of smokeless tobacco, exposure to sunlight, and an increased prevalence of HPV.
Tobacco

Tobacco use is among the most common risk factors for oral diseases and conditions. The use of smokeless tobacco products as well as cigarette smoking is associated with several types of oral and pharyngeal cancers, and makes it more difficult to treat other conditions such as gingivitis, canker sores, and periodontal disease.

During 2010:
- 23% of Arkansas adults were current cigarette smokers.
- 24% of Arkansas high school teens smoked.

Further, according to the 2008 PRAMS:
- 31% of recent mothers smoked before they became pregnant.
- 24% smoked during the last trimester.
- 57% resumed smoking after delivery.

In addition, in 2011:
- 7.1 of Arkansas adults reported that they used smokeless tobacco products.
- 20.3% of Arkansas white male high school teens reported current use of smokeless tobacco products.

Cleft Palate

A cleft palate (roof of the mouth) or cleft lip defect occurs early in pregnancy and causes an opening or fissure in the lip or palate. These defects cause problems with speaking, eating, and hearing as well as difficulties with teeth.

In Arkansas, the birth prevalence of cleft lip with or without a cleft palate is 12.39 per 10,000 births, compared to the United States, 10.47 per 10,000 births. However, the prevalence of cleft palate without a cleft lip is essentially the same in Arkansas, 6.33 per 10,000 births, and the United States, 6.39 per 10,000 births.

Genetic factors, maternal diet, and environmental exposures have traditionally been linked to orofacial defects. Other recent findings suggest women who smoke during pregnancy or women who were diagnosed with diabetes prior to pregnancy have an increased risk of having a child with a cleft palate and/or cleft lip. Therefore, the CDC recommends women who want to become pregnant and who smoke or have diabetes should talk to their physician about enhancing their chances of having a healthy baby.
Racial and ethnic disparities do exist as shown by data on current oral health status, preventive care, specific risk factors, and access to care. The table below provides 2012 statistics for various oral health indicators by race, with only two racial categories included for data consistency.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>White</th>
<th>Non-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated Caries (Children)</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td>Caries Experience (Children)</td>
<td>60%</td>
<td>69%</td>
</tr>
<tr>
<td>Needing Routine Care (Children)</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>Needing Urgent Care (Children)</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Extractions (Adult) (6/more teeth)</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Incidence oral/pharyngeal cancers (97-2008)</td>
<td>11.8/100,000</td>
<td>9.0/100,000</td>
</tr>
<tr>
<td>Mortality oral/pharyngeal cancers (97-2008)</td>
<td>2.8/100,000</td>
<td>4.3/100,000</td>
</tr>
<tr>
<td>Sealants for Children</td>
<td>31%</td>
<td>20%</td>
</tr>
<tr>
<td>Current Smokers—Adolescents (High School)</td>
<td>27%</td>
<td>12%</td>
</tr>
<tr>
<td>Adults</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>Smokeless Tobacco Use—Adolescents (high school)</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Smoking 3 months before pregnancy</td>
<td>39%</td>
<td>14%</td>
</tr>
<tr>
<td>Smoking during 3rd trimester</td>
<td>30%</td>
<td>11%</td>
</tr>
<tr>
<td>Smoking after pregnancy</td>
<td>33%</td>
<td>12%</td>
</tr>
<tr>
<td>Licensed Dentists</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Licensed Dental Hygienists</td>
<td>98%</td>
<td>2%</td>
</tr>
</tbody>
</table>
Preventive Care

Fluoridation

The CDC’s Water Fluoridation Reporting System (WFRS) indicates that 65% of Arkansans on community water systems enjoy the benefits of water fluoridation. However, in 2011, the Arkansas Legislature passed a bill guaranteeing fluoridated water to all Arkansans served by water systems with 5,000 or more customers. It is anticipated that by 2016, 85% of Arkansans will have access to fluoridated water.

Sealants

A dental sealant is a plastic material that is placed by dental professionals on the chewing surfaces of back teeth to prevent cavities. The sealant provides a physical barrier that prevents cavity-causing bacteria from attacking the surface of the tooth. It is recommended that sealants be placed on permanent molars when they erupt into the mouth at about age 6 and on the second permanent molars when they appear at about age 12. Unfortunately, this highly effective tool is not widely used at this time. Screening activities in Arkansas over the past few years indicated that:

27% of the children screened in 2010 had sealants, compared to 17% of children screened during 2008.

18% of the adolescents screened in 2008 had sealants, while 21% of adolescents screened during 2004-2006 had sealants.

Routine dental care

Regular contact with a dentist and/or dental hygienist helps to reduce the risk of disease and increases the chances that emerging infections or cancerous lesions will be detected early, when treatment is most likely to be effective. These visits should be started early in life and maintained throughout adulthood.

The 2002 Adult Oral Health phone survey, the 2002 Community Health Center Survey of Oral Health, and the 2005 Survey of Older Adults all indicated differences in the percentages of adults receiving care from a dentist within the past year. Fewer low-income individuals (49%) reported receiving dental care in the period than did other adults (60%). Further, low-income adults were more likely to seek care for more acute procedures – i.e., extraction of teeth (27%, compared to 7%) or restoration of cavities (22%, compared to 14%).

Reasons given for not seeking care also differed between the three groups. Not unexpectedly, low-income individuals more often cited cost as a reason for not having been to the dentist in the last year. Lack of available dentists and inability to take time from work were also more often mentioned by lower-income adults.
Focus Area #1: Education

In the 1930’s, a major public health shift occurred — the promotion of overall health became equally as important as the prevention of diseases. Education has become a key component in most major public health initiatives. Education involves educating the public, the providers, and the policy-makers concerning key oral health issues.

Recommendations and Strategies

Recommendation 1.1. Develop a comprehensive statewide oral health education and awareness program. The program should include at a minimum:

- A statewide media campaign with messages about the value and importance of oral health and the impact of poor oral health on systemic health.
- Specific messages for populations identified as most at risk for poor oral health such as low-income populations, populations with developmental disabilities, and the elderly.
- Culturally and linguistically appropriate materials.
- The incorporation of oral cancer prevention and awareness messages into existing state and local cancer prevention efforts.
- Targeted marketing to increase personal responsibility in oral health.
- The benefits of proven prevention strategies, including dental sealant and community water fluoridation.

The Arkansas State Oral Health Plan outlines a series of initiatives in the following four focus areas:

- Education
- Access
- Prevention
- Policy
**Strategy:**

1. On an ongoing basis, coordinate current statewide efforts and resources, including, but not limited to:
   - CDC funded programs
   - OOH oral health education activities
   - Head Start/Early Head Start oral health curricula and dental health practices
   - Delta Dental Plan’s “Land of Smiles” activity kits
   - National Children’s Oral Health Foundation: *America’s ToothFairy*
   - OH long-term-care facilities oral health education efforts
   - OOH Smokeless Tobacco Prevention efforts
   - Other programs as they emerge

**Recommendation 1.2.** Provide prenatal education to all pregnant women with an emphasis on the relationship between maternal oral health and pre-term low birth weight, the relationship between maternal oral health and infant oral health, and the benefit of establishing positive oral health behaviors in infancy.

**Strategies:**

1. Establish a partnership between ADH, the Women, Infants, and Children (WIC) program, community health centers, Area Health Education Centers, hospitals and private health care providers to provide prenatal education.

2. Continue to promote Colgate’s *Bright Smiles Bright Futures* program targeting oral health education for pregnant women and new mothers.

**Recommendation 1.3.** Evaluate and support comprehensive, school health curricula with an oral health education and prevention component in all Arkansas schools to assure that children are healthy to learn.

**Strategies:**

1. On an ongoing basis, promote the Delta Dental Plan of Arkansas “Land of Smiles” educational curriculum.

2. On an ongoing basis, work with Head Start agencies and the ABC program to ensure that oral health education and dental health practices are actively promoted to their students.

3. Disseminate survey information on oral health learning and dental curriculum gathered and analyzed by evaluation team.

**Recommendation 1.4.** Provide information on oral disease prevention and treatment, utilizing the entire health care workforce to spread the oral health message in communities.

**Strategies:**

1. On an ongoing basis, maintain an exhibit and accompanying materials for schools, health fairs, Hometown Health Coalitions, and other community activities so that members of the health care team can provide information within their communities.

2. On an ongoing basis, develop programs to educate medical providers (including medical students; and medical residents in pediatrics, internal medicine and family practice) about the prevention of oral disease, the use of fluoride varnish, ECC, existing oral health services in communities, and where to refer patients for oral health services.
Education

3. Work to include oral health disease control as a component of overall health promotion in the curricula and training experiences of all Arkansas’ schools of medicine, public health, nursing and other allied health professions.

4. Work to build and strengthen critical partnerships between dental and medical communities with an emphasis on pediatricians and primary care providers (the importance of establishing a dental home for all Arkansans by age one).

Recommendation 1.5. Expand mechanisms to support dental professional education for Arkansas residents.

Strategies:
1. On an ongoing basis, continue work with the ASDA, ASDHA and the General Assembly to fund Arkansas students in dental schools and to expand the number of Arkansas students accepted into dental programs each year. Continue consideration of dental education opportunities within Arkansas, including dental schools, dental hygiene programs, residency training and fellowships.

2. On an ongoing basis, pursue outside funding sources to further support in-state and out-of-state dental education.

3. Support programs and curriculum that bring attention to and outline the benefits and rewards of careers in the dental professions.

Recommendation 1.6. Support efforts to provide post-graduate dental education through general practice residencies and pediatric dental residencies.

Strategies:
1. Continue to work with community groups, community health centers, dental schools and dental hygiene programs to expand or create new residency opportunities in general dental practice and pediatric dentistry.

2. Continue to support UAMS efforts to establish a Center for Dental Education with the development of a hospital based general dentistry residency program.

Recommendation 1.7. Promote oral health education and practices in Certified Nurse’s Assistant, Licensed Practical Nurse, Registered Nurse, and other medical educational programs that are responsible for caring for older adults.

Strategies:
1. Find and develop new coalition members from nursing educational programs and older adult advocacy groups and organizations.

2. Work with nursing programs to incorporate oral health education into training and educational curriculum.

Recommendation 1.8. Educate dental professionals and advocates on abuse and neglect issues involving children, older adults, and disabled individuals.

Strategy:
1. Continue to support and encourage the PANDA program—Prevent Abuse and Neglect through Dental Awareness.
Focus Area #2: Access

Without adequate access to dentists and dental hygienists, preventive and restorative care is not possible. Unfortunately, data indicate that in Arkansas, many residents have limited access.

In 2011, the Arkansas State Board of Dental Examiners indicated that there are 1,226 dentists living and practicing in the state. The majority (84%) are practicing general dentistry. The rest are specialists, including endodontists (2%), oral and maxillofacial surgeons (4%), orthodontists (5%), pediatric dentists (4%), periodontists (2%), prosthodontists (1%) and two oral and maxillofacial pathologists. According to the ConnectCare program, 963 dentists and dental groups are enrolled in Medicaid.

These dental practitioners are not, however, equally distributed across the state. Six counties do not have any dentists at all, and 11 counties have 26 or more dentists. Greater than 60% of the state’s dentists practice in just 8 counties. (These 8 counties account for over 43% of the state’s population.)

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**Recommendations and Strategies**

**Recommendation 2.1.** Continue to encourage increased dental participation in Medicaid.

**Strategies:**

1. On an ongoing basis, actively promote dentist participation in Medicaid through targeted marketing campaigns, such as the Head Start Dental Initiative Grant program.

2. Support “cost of living” increases to Medicaid reimbursement schedules.

3. Work to encourage private dental providers to utilize the ConnectCare program.

**Recommendation 2.2.** Increase the representation of students from underrepresented minorities in dental schools and dental hygiene programs.

**Strategies:**

1. Continue to work with the Arkansas Medical, Dental and Pharmaceutical Association and the National Dental Association Foundation to increase the number of Arkansas minority students receiving scholarships.

2. Continue to develop and support Dental Student Scholarship Programs and alternatives to monetary payback to provide full tuition grants and monthly living stipends for under-represented minority students agreeing to practice in underserved areas of the state. Inform and educate these students about the scholarship once established.

3. Continue to work with dental schools and Arkansas dental hygiene programs, in collaboration with other health professions schools, to seek funding for the development of programs to attract under-represented minority students into the health professions.

**Recommendation 2.3.** Increase the number and types of community-based experiences available to students of dentistry and dental hygiene.

**Strategies:**

1. On an ongoing basis, support efforts through Community Health Centers and Area Health Education Centers to provide community-based experiences for health professions students through such programs as the SEARCH (Student Resident Experience And Rotations in Community Health) program.

2. On an ongoing basis, create linkages between schools of dentistry and dental hygiene so that community-based programs (school-based and school-linked clinics, dental sealant programs, and state facilities that serve the developmentally disabled) can serve as service and rotation sites for students of dentistry and dental hygiene.

**Recommendation 2.4.** Integrate information and training experiences into the dental and dental hygiene education curricula that will allow these dental health professionals to treat a diverse public.

**Strategies:**

1. Incorporate principles of culturally competent health care in the curricula of all Arkansas’ programs for the health professions, including dental residencies and dental hygiene programs.

2. Ask schools to provide specific experiences for students in the treatment of populations that require special care, particularly the developmentally disabled, the elderly and children under age five.
**Recommendation 2.5.** Expand the continuing education opportunities for currently practicing dentists and dental hygienists in the area of dental public health.

**Strategies:**

1. With collaboration between the Office of Oral Health and the College of Public Health, develop a partnership among training programs for dentistry and dental hygiene education, dental professional associations, and public health education and training programs to recommend and develop qualified continuing education opportunities in dental public health and oral disease prevention for existing practitioners of dentistry and dental hygiene.

2. Continue to develop service-learning opportunities for dentists and dental hygienists in collaboration with facilities that serve special needs populations, such as the developmentally disabled, nursing home residents, and those living with HIV disease.

3. Coordinate local public health department continuing education programs with local dental and dental hygiene association efforts to provide service-learning for dentist and dental hygienist for special populations.

**Recommendation 2.6.** Create opportunities to take oral health services into areas and populations not currently served.

**Strategy:**

1. On an ongoing basis, work with the Arkansas Department of Health, Medicaid, the Arkansas State Board of Dental Examiners, community groups and potential funding sources to create new programs for community dental services, including but not limited to mobile dental operatories, portable dental operatories, and school-based/school-linked dental services.

2. Support the continued development of Collaborative Practice Dental Hygiene which can offer preventive and referral services to populations who do not have access to traditional dental care.

3. Continue to support and encourage participation in ARMOM.

**Recommendation 2.7.** Increase access to dental services for persons with developmental disabilities.

**Strategies:**

1. Work with Development Disabilities Services, the Office of Oral Health, Partners for Inclusive Communities and the ASDA to create a list of dentists, specially trained to treat patients with development disabilities. Provide no-cost, ongoing continuing education for dentists and dental hygienists willing to be listed in a state database of providers for special needs patients.

2. Continue to work with Department of Human Services to increase reimbursement for services to persons with developmental disabilities who require special treatment modalities, including desensitization and relaxation procedures.

3. On an ongoing basis, provide information through a variety of venues to the guardians of persons with developmental disabilities on the importance of good oral health.

4. Continue to support and expand Special Olympics' “Special Smiles” program in Arkansas.
**Recommendation 2.8.** Provide funding for public health clinic start up and maintenance grants and other safety net programs including community health centers and not-for-profit volunteer programs.

**Strategy:**
1. On an ongoing basis, pursue funding for community health center dental expansion and volunteer community programs through the Tobacco Master Settlement Agreement and other funding mechanisms.

**Recommendation 2.9.** Establish a process for the systematic, ongoing collection of oral health workforce capacity in Arkansas, and utilize that system to assess the distribution of and potential need for general dentists and dental specialists, particularly pediatric dentists.

**Strategies:**
1. Continue to work with the Arkansas State Dental Association, the Arkansas State Dental Hygienists’ Association, UAMS College of Public Health and the Arkansas State Board of Dental Examiners to create a sustainable database of practitioners, their hours of practice and availability. Use the database to help design programs to increase appropriate distribution of dentists and dental hygienists.
2. Request the Arkansas State Board of Dental Examiners to consider dental workforce data element collection as part of the licensure renewal process and make recommendations to appropriate agencies regarding the oral health workforce in Arkansas.

**Recommendation 2.10.** Create and maintain an oral health surveillance system for use by policy makers and program planners to most effectively address the oral health needs of Arkansans across the lifespan.

**Strategy:**
1. Continue to examine existing data sets containing public health and oral health data for potential relevance and contribution to the established state oral health surveillance system. At a minimum the following data sets should be assessed for elements to be included in the state oral health surveillance system:
   - Arkansas Department of Health Needs Assessments
   - Behavioral Risk Factor Surveillance System (BRFSS)
   - Youth Behavioral Risk Surveillance (YRBS)
   - Arkansas Cancer Registry
   - National Oral Health Surveillance System data submitted by Arkansas
   - Arkansas Medicaid data
   - Data on the health insurance benefit packages for both public and private insurance
   - Pregnancy Risk Assessment Monitoring System (PRAMS)
   - Hospital discharge data
   - School nurses’ surveys on children receiving an annual dental check-up
   - Youth Tobacco Survey
   - Arkansas Reproductive Health Monitoring System
Recommendation 2.11. Work to make available to all dentists in the state the benefits of the Connect Care program.

Strategy:
1. Continue to support and advocate for the ConnectCare program. Encourage exhibiting at conventions and consider ways to inform dentists of the benefits of participating in the program.

Recommendation 2.12. Pursue specific funding for loan repayments or loan forgiveness for Arkansas dental school graduates who agree to practice in a dentally underserved area, or to serve an underserved population (e.g., persons with developmental disabilities) upon graduation. Focus resources on applications from rural areas in an effort to improve retention in rural communities.

Strategy:
1. On an ongoing basis, work with the General Assembly to create a program for loan forgiveness or low interest loans for dentists and dental hygienists who practice in underserved communities based on an obligation to practice and see a minimum percentage of most-needy patients. Identify state funding to match federal loan repayment program dollars for dentists and dental hygienists.

Recommendation 2.13. Decrease the number of people in Arkansas who are uninsured for dental services.

Strategy:
Develop programs for the business community on the importance of oral health in relation to employee health in an effort to assure dental coverage as part of employer sponsored health insurance plans.

Recommendation 2.14. Create incentives to support those dental professionals practicing in underserved areas of the state.

Strategies:
1. Work with the General Assembly, professional associations and potential funding sources to create a unified system of tax credits, loan forgiveness, low interest loans and other mechanisms to reward dental professionals practicing in underserved areas.
2. Continue to design and/or implement programs to actively recruit promising students from underserved areas toward dental careers. (Ongoing as part of the HRSA Oral Health Workforce Development grant)

Recommendation 2.15. Improve outreach to involve dentists and dental hygienists in private practice in community-based efforts to improve oral health and access to care.

Strategy:
1. Continue to support ARMOM with monies and volunteer efforts.
2. Stay connected with various non-profit organizations and entities to be able to promote to dentists and dental hygienists volunteer opportunities.
Recommendation 2.16: Utilize Innovative mechanisms to provide increased access to care.

Strategies:

1. Continue to be on the leading edge of science and workforce developments that could contribute to better oral health for Arkansans.

2. Support efforts to establish educational facilities and programs in the state that will increase dental workforce availability and insure adequate manpower for the demands of the future.
Focus Area 3: Prevention

The most common oral diseases and conditions can often be prevented. Safe and effective measures are available to reduce the incidence of oral disease, reduce disparities, and increase quality of life.

Community Water Fluoridation

Community water fluoridation is the process of adjusting the natural fluoride concentration of a community’s water supply to a level that is best for the prevention of dental caries. In the United States, community water fluoridation has been the basis for the primary prevention of dental caries for 60 years and has been recognized as one of 10 great achievements in public health of the 20th century. It is an ideal public health method because it is effective, eminently safe, and inexpensive, requires no behavior change by individuals, and does not depend on access or availability of professional services. Water fluoridation is equally effective in preventing dental caries among different socioeconomic, racial, and ethnic groups. Fluoridation helps to lower the cost of dental care and helps residents retain their teeth throughout life. Recognizing the importance of community water fluoridation, Healthy People 2020 Objective OH-13, is to “Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water to 79.6 percent.” In the United States during 2002, approximately 170 million persons (67 percent of the population served by public water systems) received optimally fluoridated water. Not only does community water fluoridation effectively prevent dental caries, it is one of very few public health prevention measures that offer significant cost savings to almost all communities. It has been estimated that about every $1 invested in community water fluoridation saves approximately $38 in averted costs. The cost per person of instituting and maintaining a water fluoridation program in a community decreases with increasing population size.

The 2011, the Arkansas General Assembly passed ACT 197 guaranteeing access to fluoridated water for all persons on water systems serving 5,000 or more customers. Signed into law by Governor Mike Beebe, the statute will increase the percentage of Arkansans whose water systems are fluoridated from 64.7% to almost 87%.
**Dental Sealants**

Since the early 1970s, the incidence of childhood dental caries on smooth tooth surfaces (those without pits and fissures) has declined markedly because of widespread exposure to fluorides. Most decay among school age children now occurs on tooth surfaces with pits and fissures, particularly the molar teeth. Pit-and-fissure dental sealants—plastic coatings bonded to susceptible tooth surfaces—have been approved for use for many years and have been recommended by professional health associations and public health agencies. First permanent molars erupt into the mouth at about age 6 years. Placing sealants on these teeth shortly after their eruption protects them from the development of caries in areas of the teeth where food and bacteria are retained. If sealants were applied routinely to susceptible tooth surfaces in conjunction with the appropriate use of fluoride, most tooth decay in children could be prevented. Second permanent molars erupt into the mouth at about age 12 to 13 years. Pit-and-fissure surfaces of these teeth are as susceptible to dental caries as the first permanent molars of younger children. Therefore, young teenagers need to receive dental sealants shortly after the eruption of their second permanent molars.

**Tobacco Control**

Tobacco use has a devastating effect on the health and well-being of the public. More than 400,000 Americans die each year as a direct result of cigarette smoking, making it the nation’s leading preventable cause of premature mortality, and smoking causes over $150 billion in annual health related economic losses. The effects of tobacco use on the public’s oral health are also alarming. The use of any form of tobacco — including cigarettes, cigars, pipes, and smokeless tobacco — has been established as a major cause of oral and pharyngeal cancer. The evidence is sufficient to consider smoking a causal factor for adult periodontitis; one-half of the cases of periodontal disease in this country may be attributable to cigarette smoking. Tobacco use substantially worsens the prognosis of periodontal therapy and dental implants, impairs oral wound healing, and increases the risk of a wide range of oral soft tissue changes.
**Recommendations and Strategies**

**Recommendation 3.1.** As a result of the passage of ACT 197, increase the percentage of the Arkansas residents on community water systems receiving the benefits of water fluoridation.

**Strategies:**
1. On an ongoing basis, build and maintain adequate capacity and infrastructure within ADH – including the Office of Oral Health, the Division of Engineering, the State Health Laboratory and Information Technology – to support fluoridation continuation and new community start-ups.
2. On an ongoing basis, continue collaborations with the Arkansas State Dental Association, the Arkansas Head Start Association, the Arkansas AGD, and the Arkansas State Dental Hygienists Association and other stakeholders for their members to support and promote fluoridation.

**Recommendation 3.2.** To reduce the incidence of dental caries in Arkansas, replicate and expand the current school-based dental sealant programs into new venues to achieve the Healthy People 2020 goal of 28% dental sealant rate.

**Strategies:**
1. Identify funding to support infrastructure needs so as to increase the number of school children served by dental sealant programs.
2. Maintain funding to create a statewide dental sealant program for those children at highest risk. Create mechanisms to provide dental sealants in two venues: (1) in school-based/school linked programs in areas without dentists providing sealants, and (2) enlist private practice dentists and provide reimbursement to cover those children not qualified for other payment modalities.

**Recommendation 3.3.** Promote healthy dietary choices in schools.

**Strategy:**
Work with parent/teacher groups, other government department divisions, other stakeholders, and legislators to encourage the development of programs promoting healthy dietary choices in schools with an emphasis on the effect dietary habits have on the health of the oral cavity.

**Recommendation 3.4.** In support of Act 89, promote provision of assessment and preventive dental services to underserved populations by collaborative practice dental hygienists under appropriate supervision.

**Strategy:**
Encourage and help develop collaborative practice business models and outreach services and programs to bring preventive dental services and dental referral opportunities to children, older adults, disabled individuals and other underserved populations.

**Recommendation 3.5.** In support of Act 90, promote the efforts of physicians, nurses, and other licensed healthcare professionals to apply fluoride varnish to children’s teeth.

**Strategy:**
Educate, encourage, and promote physicians’, nurses’, and other licensed healthcare professionals’ efforts to apply fluoride varnish to children’s teeth during physician visits in order to address and bring emphasis to dental disease, early childhood caries, and the need to establish a dental home.
Recommendation 3.6. Promote oral cancer screenings by dentists and dental hygienists.

Strategies:
1. Identify funding to implement and maintain a public/private statewide partnership that focuses on the prevention and control of oral and pharyngeal cancer.
2. Develop and implement community-based efforts that empower local communities to help prevent oral and pharyngeal cancer.
3. Develop a plan to educate dentists and primary-care providers on the importance of, and the protocol for, conducting oral-cancer examinations, especially for those at high risk for oral cancer.
4. Collaborate with the Cancer Coalition, the Oral Health Coalition and other agencies to coordinate and support national oral and pharyngeal cancer awareness and education campaigns.
5. On an ongoing basis, provide education for the public to increase awareness of oral cancers.

Recommendation 3.7. Promote tobacco use prevention and cessation in dental offices.

Strategies:
1. Maintain funding to educate and provide resources for dental offices and primary-care providers attempting to promote tobacco cessation.
2. Work with the ADH Tobacco Cessation and Prevention program to enlist oral health and primary care providers to participate in alcohol and tobacco education and cessation programs.
3. Maintain resources for dentist and primary-care providers to participate in tobacco prevention and cessation programs.
Policy

Focus Area 4: Policy

A policy is a principle or rule to guide decisions and achieve rational outcomes. A policy is a statement of intent, and is implemented as a procedure or protocol. Policy guides actions toward those that are most likely to achieve a desired outcome.

Policy may also refer to the process of making important organizational decisions, including the identification of different alternatives such as programs or spending priorities, and choosing among them on the basis of the impact they will have.

The Office of Oral Health and the Oral Health Coalition work together to promote policies that affect the oral health of Arkansans.

Recommendations and Strategies

Recommendation 4.1. Work with existing groups representing minorities and with the Arkansas Minority Health Commission to increase minority representation in dental schools and dental hygiene programs.

Strategy:

On an ongoing basis, seek funding from the General Assembly and a variety of other sources that would assist minority students in attending dental and dental hygiene programs and promote their entry into the workforce.

Recommendation 4.2. Seek regulatory or legislative changes that would allow expanded functions of dental auxiliary personnel under appropriate supervision in a variety of ongoing dental settings.

Strategy:

Work with the Arkansas State Board of Dental Examiners, the Arkansas State Dental Association and the Arkansas State Dental Hygienists Association to develop preventive therapy modalities by dental hygienists commensurate with their training and experience.

Recommendation 4.3. Create opportunities in all elementary and secondary schools for required oral health education.

Strategy:

On an ongoing basis, work with the Department of Education and the General Assembly on policies that would require appropriate, evaluated curricula on oral hygiene, proper nutrition, and other aspects of oral health in all Arkansas schools.
Recommendation 4.4. Advocate for the importance of the Adult Dental Medicaid program and work to insure its continuance.

**Strategies:**

1. On an ongoing basis, continue to assess oral health needs for all Arkansans, especially those at highest risk for poor oral health.

2. On an ongoing basis, provide information to legislators and other policy makers on the need to sustain adult Medicaid funding, utilizing various member organizations of the Coalition. (Coalition Resolution #4, approved unanimously on January 15, 2005 states “that the Arkansas Oral Health Coalition, comprised of more than thirty-two organizations interested in optimum oral health throughout Arkansas, supports the proposed $2.6 million increase in current Medicaid funding to increase reimbursement rates for participating dentists in the ARKids program to improve oral health for Arkansas children.”)

3. On an ongoing basis, assess barriers to access to care and resulting deficiencies in individual and population based oral health.

Recommendation 4.5. Establish mechanisms for the continued existence and operation of the Arkansas Oral Health Coalition.

**Strategies:**

1. On an ongoing basis, maintain the formal guidelines for the coalition that specify the functions of the coalition and provide for its continued efforts toward optimum oral health for all Arkansans.


Recommendation 4.6. Include representatives from key stakeholder groups and from populations disproportionately affected by oral health problems (e.g., the elderly, persons with developmental disabilities) in the Arkansas Oral Health Coalition.

**Strategy:**

On an ongoing basis, actively recruit participation from a wide variety of agencies, organizations and community groups representing underserved populations and those that serve their needs.

Recommendation 4.7. Effectively utilize the Arkansas Oral Health Plan.

**Strategies:**

1. Optimize the impact of the Arkansas Oral Health Plan through monitoring and continued development of the plan via the Arkansas Oral Health Coalition and other public or private partners.
2. Evaluate Arkansas Oral Health Plan utilizing evaluation tools developed by CDC’s Division of Oral Health and other instruments as they become available.

**Recommendation 4.8.** Identify funding streams to assure the long-term development and institutionalization of the Arkansas Oral Health Coalition.

**Strategy:**
On an ongoing basis, promote the efforts of the Coalition to enlighten potential supporters about the need for the Coalition and the impact of effective oral health programs.

**Recommendation 4.9** Pursue policy changes and educational opportunities that will increase effective practice of infection control in dentistry.

**Strategy:**
On an ongoing basis, work with Coalition partners and outside entities to ensure appropriate continuing education opportunities on infection control.

**Recommendation 4.10.** Pursue policy changes, programs, and educational opportunities that will lead to better oral health for older adults.

**Strategies:**
1. Encourage and support collaborative dental hygiene outreach programs through private or public health venues that address the lack of oral health care for older adults in nursing home facilities or in their own homes.
2. Work to achieve and develop mechanisms for funding oral health care for older adults.
References


Tomar S, Asma S (2000). *Smoking-attributable periodontitis*