Office of Oral Health Surveillance Plan
Arkansas Department of Health

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Arkansas Office of Oral Health

The Arkansas Department of Health (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 was established within the Arkansas Department of Health in 1999. From a starting point of one staff person and no program budget, the Office of Oral Health employs 4.5 Full Time Equivalents (FTE) and an annual budget of over $600,000.

The vision for the Arkansas Department of Health, Office of Oral Health (Office) is "Optimum oral health for every citizen of Arkansas". To that end, the Office provides resources and support for counties, communities, neighborhoods, schools, and professional groups to address oral health needs and disparities.

The mission of the Office is to allow all Arkansans to enjoy optimum oral health. Working through not only public health core functions of assessment, policy development and assurance, but also through education, prevention and access, the Office strives to improve oral health throughout the state. Programmatic activities benefit children, adults, the elderly and those with special needs.

The Office continues to collaborate with and receive strong support from the Arkansas General Assembly, the leadership and administration of the Arkansas Department of Health (ADH). Internal partnerships within the Arkansas Department of Health include the Pregnancy Risk Assessment Monitoring System, Behavioral Risk Factor Surveillance System, Tobacco Prevention and Cessation Program, Infection Control Committee, Chronic Disease Forum, 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) which includes numerous public and private organizations with interests in the oral health of the public. The Arkansas State Board of Dental Examiners, Arkansas State Dental Association, Arkansas Dental Hygienists’ Association and UAMS Center for Dental Education have been integral to our mission.

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

Programs

*Community Water Fluoridation*

Community water fluoridation (CWF) is promoted through a CDC cooperative agreement. Activities include presentations on the benefits and costs of CWF internally within the ADH and externally to various governing bodies, community leaders and lay citizens through the distribution of informational packets and campaigns to include print and broadcast media. Internal partners include the ADH Section of Engineering and the Office of Communications and Marketing among others.
Sealants

In 2007, a formalized sealant program was initiated with funding through the Daughters of Charity Foundation (DOCF). The Office was able to purchase newspaper and broadcast ads with the assistance of the ADH Office of Communications and Marketing. Clinical activities included coordination and clinical services with Arkansas Children’s Hospital (ACH). In 2009, with assistance through a CDC grant, ACH became the primary provider of sealants throughout the state.

Family Violence Prevention

Working with the Delta Dental Foundation (DDF) of Arkansas and utilizing Health Resources and Services Administration (HRSA) funding, the Office assisted with the promotion of the Prevent Abuse and Neglect through Dental Awareness (P.A.N.D.A.) program. The program is designed to prevent family violence through the provision of lectures and in-service trainings for dentists, dental hygienists, physicians, nurses, teachers, day care workers and other interested groups.

Workforce

Through a HRSA Oral Health Workforce Development grant, the Office promotes Arkansas dental careers through outreach and recruitment of prospective dental students to the profession and grants-in-aid to new dentists and dental hygienists agreeing to work in health care shortage areas across the state. Delta Dental of Arkansas Foundation and the Community Health Centers and Partners for Inclusive Communities have all contributed to recruiting efforts. The intent of these initiatives is to increase the number of oral health care professionals returning to the state thus improving access to care for all Arkansans. The members of the AOHC have been invaluable in recruitment and incentive initiatives.

Funding

In addition to state and private support, the Office has maintained and expanded capacity and programmatic activities through agreements with the CDC and HRSA.

Recent successes

In March of 2011, three oral health bills advanced by the Office and the AOHC were passed by the Arkansas General Assembly and signed by the Governor. The new statutes guarantee access to fluoridated water on all water systems serving 5000 or more people, allows physicians and nurses to provide fluoride varnish to children’s teeth; and creates a category of collaborative practice dental hygienists who can then provide hygiene services in designated public settings without the patient having first seen a dentist.

The Office maintains active and vibrant collaboration with a wide variety of Arkansas organizations and entities. These include Delta Dental of Arkansas Foundation that provides all funding for fluoridation equipment in mandated water systems and Arkansas Children’s Hospital with whom the Office conducts the Seal-the-State dental sealant initiative. The Healthy Connections dental clinic also provides a screening and sealant program. In addition, Children International in coordination with University of Arkansas at Little Rock maintains a sealant program along with comprehensive dental care for children at high risk. The Community Health Centers of Arkansas assists with grants-in-aid from the Office to community health centers for incentives for new dentists practicing in underserved areas.
Future

In addition to the above, a significant focus for future activities includes strong collaboration between the Office and the University of Arkansas for Medical Sciences Center for Dental Education. These will include the provision of direct clinical services, expansion of access to care and educational opportunities for dental students, residents and current practitioners.

The establishment of initiatives and pilot programs for the delivery of care to those in nursing home/long-term care facilities and home-bound patients is also a goal.

A state-wide trauma system has recently been established and hitherto not contained provisions for dental input. Protocols for the management of dental emergencies and trauma in the emergency room setting are also issues of significant concern.

With support of the many individuals and organizations with interest in health care and oral health in particular, the Office hopes to continue to play a vital role in the promotion and provision of oral health care to the citizens of Arkansas.
Arkansas Office of Oral Health Surveillance System: An Introduction

Purpose

The surveillance system has a broad role for Arkansas. The surveillance system drives the objectives and activities within the Arkansas Office of Oral Health. The system is used to measure the prevalence of selected indicators that determine the state of oral health in Arkansas. It is a plan to monitor the burden of oral disease in the state, monitor progress towards the Office of Oral Health goals and objectives, and disseminate oral health data to coalitions, policy leaders, and other stakeholders at the national, state and local levels.

The ideal surveillance system for oral health in the state of Arkansas is: (1) comprehensive, incorporating data on a variety of indicators for factors that contribute to the overall oral health of the citizens of the state; (2) inexpensive, relying as much as possible on existing data sources that can be accessed at little or no additional cost; (3) timely, allowing the system to be updated as new data are collected; (4) current, with data being available for updating the system soon after they are collected; and (5) flexible, able to accommodate new indicators and data sources that may become important and available. The plan outlined below is thought to be such a system. It can be sustained over time with minimal cost to the program and provide a comprehensive picture of the status of oral health – overall, for each component, and for key at-risk or target groups – periodically (cross-sectional pictures) and over time (trend views). The logic model upon which the Arkansas Oral Health Surveillance System is built is on p. 6.

Objectives

The Arkansas Oral Health Surveillance System will:

- Assess the oral health of Arkansans of all ages, from a variety of perspectives (prevention, treatment, service utilization, policy, and access to care);
- Identify high risk groups within the state’s population;
- Identify oral health needs and resources within Arkansas;
- Monitor trends in key oral health indicators, identifying areas of success and challenge;
- Promote awareness of health and economic benefits of oral health among the state’s citizens and policy-makers;
- Promote the implementation of evidence-based oral health programs to serve the populations and areas in greatest need within the state; and
- Assist in evaluating programmatic efforts at the state level.
Arkansas Office of Oral Health Surveillance Components

Logic Model

**INPUTS**

- **Staff**
  - Epidemiologist
  - Office of Oral Health

- **Data Sources**
  - State data sources
    - Cancer registry
    - Vital statistics
    - State Board of Dental Examiners
  - National data sources
    - BRFSS
    - YRBS
    - WFRS
    - US Census
    - CDC

- **Other**
  - Hardware & software
  - Funding
  - Community support
  - Coalition support

**ACTIVITIES**

- **Develop surveillance plan**
  - Objectives
  - Flow chart
  - Indicators
  - Data sources
  - Data gaps
  - Data collection
  - Maintenance

- **Collect data**
  - Existing data
    - Primary data collection
    - 5-year 3rd grade screening
    - 5-year adult survey
  - Complete data entry
  - Complete data analysis
  - Interpret findings

- **Prepare surveillance report(s)**
- Disseminate surveillance results

- **Evaluate surveillance system**

**OUTCOMES**

- **Ongoing monitoring of trends in oral health indicators**
- Identification of high-risk groups and geographic areas
- Implementation of programs to serve areas and populations in greatest need
- Use of surveillance data for program planning, implementation, and evaluation

**Improved oral health**

- Among high-risk populations
- Statewide
  - Children/adolescents
  - Adults/elderly

**SYSTEM EVALUATION**
Stakeholders

The Arkansas Oral Health Coalition (AOHC) 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 the Office of the Governor, the Arkansas General Assembly, the Office of Oral Health, the Division of Medical Services, the Arkansas State Dental Association, the Arkansas Dental Hygienists’ Association, and BHM International, Inc. (healthcare consulting firm). 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 efforts, the team invited other interested parties and expanded over the subsequent years to what is now the AOHC. The Coalition has adopted the slogan “SMILES: AR, U.S.” All reports and data produced as specified in the surveillance plan will be distributed to the Oral Health Coalition on a regular basis. The Coalition meets monthly and includes a diverse set of organizations and agencies from across the state. Members of the AOHC currently include:

Arkansas Academy of General Dentistry
Arkansas Advocates for Children and Families
Arkansas Center for Health Improvement
Arkansas Chapter – American Academy of Pediatrics
Arkansas Commission on Child Abuse, Rape, and Domestic Violence
Arkansas Dental Assistants Association
Arkansas Department of Education
  Office of Comprehensive Health Education
Arkansas Department of Health
  Connect Care program
  Office of Oral Health
  Office of Rural Health and Primary Care
  Tobacco Prevention and Cessation Program
Arkansas Department of Human Services
  Office of Developmental Disabilities
  Office of Medical Services (Medicaid)
Arkansas Department of Higher Education
Arkansas Head Start Association
Arkansas Health Care Access Foundation
Arkansas Minority Health Commission
Arkansas School Nurses Association
Arkansas State Board of Dental Examiners
Arkansas State Dental Association
Arkansas State Dental Hygienists’ Association
Conway Interfaith Clinic
Community Dental Clinic (Fort Smith)
Community Health Centers of Arkansas, Inc.
Delta Dental Plan of Arkansas
Healthy Connections, Inc.
Interfaith Clinic of El Dorado
Partners for Inclusive Communities
Pulaski Technical College
  Dental Assisting Department
University of Arkansas
  Cooperative Extension Service
UAFS Dental Hygiene Program
UALR Children International
UAMS
  Arkansas Cancer Research Center
  College of Health Related Professions
    Department of Dental Hygiene
  College of Public Health
    Donald W. Reynolds Center on Aging
  UAMS Regional Programs (AHECs)
  Winthrop Rockefeller Cancer Institute
Arkansas Office of Oral Health Indicators

Indicators were selected using the Healthy People 2020 objectives and goals developed as a collaborative process among the U.S. Department of Health and Human Services (HHS) and other federal agencies, public stakeholders, and an advisory committee. The overall goals of the Healthy People 2020 oral health objectives is to prevent and control oral and craniofacial diseases, conditions, and improve access to related services.

The Arkansas-specific oral health indicators and goals were selected by the Office of Oral Health and are available from the Healthy People 2020: Arkansas’s Chronic Disease Framework for Action, a collaborative project between the Arkansas Chronic Disease Coordinating Council, the Chronic Disease programs of the ADH, and their coalitions and partners. The goal of the project was to develop a set of chronic disease objectives, with Arkansas baseline data and target goals, to be used to track progress towards Healthy People 2020 objectives in Arkansas. The Office of Oral Health selected indicators for inclusion in the Framework for Action based on common objectives already addressed by the program and the Arkansas Oral Health Coalition.

The state-specific oral health indicators will be evaluated using the established Healthy People 2020 targeted goals documented in the Framework for Action. The indicators will be measured periodically by the Office of Oral Health and measured in the burden report every five-years as indicated by the CDC Division of Oral Health.

For more information, see:

- National Healthy People 2020 Objectives and Goals for Oral Health

- Healthy People 2020: Arkansas’s Chronic Disease Framework for Action
## Healthy People 2020 Oral Health Indicators in the United States and Arkansas

<table>
<thead>
<tr>
<th>Healthy People 2020 Objective [Objective Number and Description]</th>
<th>National Baseline (%)</th>
<th>National Goal (%)</th>
<th>Arkansas Status (%)</th>
<th>HP 2020 Arkansas Framework for Action Goal*</th>
<th>Source &amp; Year of Arkansas Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OH - 1) Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1) Children, aged 3-5 years</td>
<td>33.3</td>
<td>30.0</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>1.2) Children, aged 6–9 years*</td>
<td>54.4%</td>
<td>49.0%</td>
<td>64.0%</td>
<td>57.6%</td>
<td>Basic Screening Survey (BSS) Third Graders, 2010</td>
</tr>
<tr>
<td>1.3) Adolescents, aged 13-15 years</td>
<td>53.7%</td>
<td>48.3%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td><strong>OH - 2) Reduce the proportion of children and adolescents with untreated dental decay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1) Children, aged 3-5 years</td>
<td>23.8%</td>
<td>21.4%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>2.2) Children, aged 6–9 years*</td>
<td>28.8%</td>
<td>25.9%</td>
<td>29.0%</td>
<td>26.0%</td>
<td>BSS Third Graders, 2010</td>
</tr>
<tr>
<td>2.3) Adolescents, aged 13-15 years</td>
<td>17.0%</td>
<td>15.3%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td><strong>OH – 3) Reduce the proportion of adults with untreated dental decay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1) Adults, aged 35–44 years*</td>
<td>27.8%</td>
<td>25.0%</td>
<td>DNC</td>
<td>DNC</td>
<td>Possible Source: BRFSS</td>
</tr>
<tr>
<td>3.2) Adults, aged 65-74</td>
<td>17.1%</td>
<td>15.4%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>3.3) Adults, 75 and older</td>
<td>37.9%</td>
<td>34.1%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td><strong>OH – 4) Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1) Adults, aged 45-64 years*</td>
<td>76.4%</td>
<td>68.8%</td>
<td>67.5%</td>
<td>48.6%</td>
<td>Behavioral Risk Factor Surveillance System (BRFSS), 2010</td>
</tr>
<tr>
<td>4.2) Adults, aged 65-74 who have lost all their natural teeth</td>
<td>24.0%</td>
<td>21.6%</td>
<td>23.3%</td>
<td>DNC</td>
<td>BRFSS, 2010 (aged 65+)</td>
</tr>
<tr>
<td><strong>OH – 5) Reduce the proportion of adults aged 45-74 years with moderate to severe periodontitis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Basic Screening Survey (BSS) Older Adults, aged 65+ 2013</td>
</tr>
<tr>
<td><strong>Healthy People 2020 Objective</strong> [Objective Number and Description]</td>
<td><strong>National Baseline (%)</strong></td>
<td><strong>National Target (%)</strong></td>
<td><strong>Arkansas Status (%)</strong></td>
<td><strong>HP 2020 Arkansas Framework for Action Goal</strong></td>
<td><strong>Source &amp; Year of Arkansas Data</strong></td>
</tr>
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</tr>
<tr>
<td><strong>OH - 6)</strong> Increase the proportion of oral and pharyngeal cancers detected at the earliest stage *</td>
<td>32.5%</td>
<td>35.8%</td>
<td>5.0 per 100,000, Stage I</td>
<td>2.0 per 100,000, Stage I</td>
<td>AR Cancer Registry, 2009</td>
</tr>
<tr>
<td><strong>OH - 7)</strong> Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year *</td>
<td>44.5%</td>
<td>49.0%</td>
<td>Adults = 61.1%</td>
<td>Adults = 70.4%</td>
<td>BRFSS, 2010</td>
</tr>
<tr>
<td><strong>OH-8)</strong> Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year *</td>
<td>30.2%</td>
<td>33.2%</td>
<td>27.0%</td>
<td>29.7%</td>
<td>2008 AR Medicaid Services Report, EPSDT Dental Utilization Rates</td>
</tr>
<tr>
<td><strong>OH-9)</strong> Increase the proportion of school-based health centers with an oral health component *</td>
<td><strong>9.1)</strong> Dental sealants</td>
<td><strong>9.1)</strong> 24.1</td>
<td>9.1)** 26.5</td>
<td>Arkansas has 1-school based dental clinic, Wakefield Elementary, Little Rock, provided 25,947 screenings and 3,340 children received 9,912 sealants</td>
<td><strong>Increase to two school-based dental clinics</strong></td>
</tr>
<tr>
<td><strong>OH-10.1)</strong> Increase proportion of Federally Qualified Health Centers (FQHCs) that have an oral health program</td>
<td>75.0%</td>
<td>83.0%</td>
<td>18 Dental Locations</td>
<td>DNC</td>
<td>Community Health Centers of Arkansas, 2012 Dental Services Fact Sheet</td>
</tr>
<tr>
<td><strong>OH-10.2)</strong> Increase the proportion of local health departments that have oral health prevention or care programs *</td>
<td>25.8%</td>
<td>28.4%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>Healthy People 2020 Objective [Objective Number and Description]</td>
<td>National Baseline (%)</td>
<td>National Target (%)</td>
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<td>HP 2020 Arkansas Framework for Action Goal*</td>
<td>Source &amp; Year of Arkansas Data</td>
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<tr>
<td>---------------------------------------------------------------</td>
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</tr>
<tr>
<td>OH-11) Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers (FQHCs) each year*</td>
<td>17.5%</td>
<td>33.3%</td>
<td>17.0% of all CHC patients receive dental services.</td>
<td>17.3% of CHC patients will receive dental services</td>
<td>Community Health Centers of Arkansas, 2012 Dental Services Fact Sheet</td>
</tr>
<tr>
<td>OH-12) Increase the proportion of children and adolescents who have received dental sealants on their molar teeth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1) Children, aged 3-5 years (primary molar teeth)</td>
<td>1.4%</td>
<td>1.5%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>12.2) Children, aged 6-9 years (permanent first molar teeth)*</td>
<td>25.5%</td>
<td>28.1%</td>
<td>27.0%</td>
<td>30%</td>
<td>BSS Third Graders, 2010</td>
</tr>
<tr>
<td>12.3) Adolescents, aged 13-15 (permanent molar teeth)</td>
<td>19.9%</td>
<td>21.9%</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
</tr>
<tr>
<td>OH-13) Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water*</td>
<td>72.4%</td>
<td>79.6%</td>
<td>67.0%</td>
<td>70.9%</td>
<td>ADH Environmental Health Branch, 2013</td>
</tr>
<tr>
<td>OH-14) (Developmental) Increase the proportion of adults who receive preventive interventions in dental offices*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Possible Source: BRFSS</td>
</tr>
<tr>
<td>14.1) tobacco use prevention or smoking cessation in the past year</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
<td>DNC</td>
<td></td>
</tr>
<tr>
<td>14.2) oral and pharyngeal cancer screening</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14.3) referred for glycemic control in the past year</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Healthy People 2020 Objective</strong> [Objective Number and Description]</td>
<td><strong>National Baseline (%)</strong></td>
<td><strong>National Target (%)</strong></td>
<td><strong>Arkansas Status (%)</strong></td>
<td><strong>HP 2020 Arkansas Framework for Action Goal</strong></td>
<td><strong>Source &amp; Year of Arkansas Data</strong></td>
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<tr>
<td>OH-15) (Developmental) Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams*</td>
<td>DNC</td>
<td>DNC</td>
<td>Cleft palate 6.3/10,000 births, cleft lip 12.4 per 10,000 births</td>
<td>Continue to meet this goal</td>
<td>Arkansas Center for Birth Defects Research and Prevention, AR 2002-2006 birth years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cleft Lip and Palate Program at Arkansas Children’s Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OH-16) Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system*</td>
<td>32 states</td>
<td>50 States and District of Columbia</td>
<td>Arkansas Reproductive Health Monitoring System (ARHMS)</td>
<td>Continue to meet this goal</td>
<td>ARHMS birth defects registry <a href="http://arbirthdefectsresearch.uams.edu/surveillance.htm">http://arbirthdefectsresearch.uams.edu/surveillance.htm</a></td>
</tr>
<tr>
<td>OH-17.1) Increase the proportion of States and local health agencies that serve jurisdictions of 250,000 or more persons with a dental public health program directed by a dental professional with public health training *</td>
<td>23.4%</td>
<td>25.7%</td>
<td>ADH Office of Oral Health serves the entire state and is directed by a dental professional</td>
<td>Continue to meet this goal</td>
<td>ADH Office of Oral Health, 2013</td>
</tr>
</tbody>
</table>


DNC = Data not collected
Arkansas Office of Oral Health Data Sources

State Data Sources
- Arkansas Central Cancer registry – Theressia Mitchell, Arkansas Central Cancer Registry, ADH
- Mortality Data – Paul Johnson, Health Statistics Branch, ADH
- State Board of Dental Examiners – Donna Cobb, ASBDE
- BSS Surveys – Carol Amerine, Office of Oral Health, ADH
- UALR Children’s International – Jolene Perkins, UALR Children’s International, UALR
- Arkansas Children’s Hospital, ‘Seal the State’ Initiative – Fidel Samour & Matthew Vermillion, ACH
- Adult/Youth Tobacco Surveys – Wanda Simon, Epidemiology/Tobacco Prevention and Cessation Program, ADH
- Arkansas Reproductive Monitoring System – Charlotte Hobbs, UAMS/ACH
- Arkansas Medicaid Statistics – Glen Poteet, Dental Coordinated Care Manager, ADH or Chawnte Booker, Medicaid Office

National Data Sources
- YRBS – CDC and the Arkansas Department of Education
- PRAMS – Mary McGehee, ADH Health Statistics Branch
- BRFSS – Mary McGehee, ADH Health Statistics Branch
- WFRS – CDC Division of Health
- US Census – [www.census.gov](http://www.census.gov)
Summary of Data Sources


2009 Arkansas Central Cancer Registry Query System: A population-based registry whose goal is to collect timely and complete data on all cancer cases diagnosed in the state. http://www.cancer-rates.info/ar/index.php


2008 Arkansas Reproductive Health Monitoring System: Established in 1980 as a pilot program, the Arkansas Reproductive Health Monitoring System (ARHMS) is one of the oldest active birth defects surveillance systems in the United States. In 1985, Arkansas State Legislature enacted legislation that provides ARHMS the authority to operate a birth defects registry. http://arbirthdefectsresearch.uams.edu/surveillance.htm

2011-2012 Arkansas “Seal-the-State”: The Arkansas Office of Oral health launched “Seal the State” as a pilot project in 2007 and the program is currently operated by Arkansas Children’s Hospital. As a result of the initial two-year pilot, more than 2,000 children received dental sealants, free of charge. During school-year 2011-2012, Arkansas Children’s Hospital screened 971 students and 797 of them received dental sealants. Data about dental caries experience and sealant application are collected and analyzed annually.

2012 Arkansas State Board of Dental Examiners: The Board is authorized by statute to license dentists and dental hygienists by examination or credentials. The Board issues specialty licenses to dentists who have post graduate training and successfully complete an examination. The Board also registers dental corporations. http://www.dentalboard.arkansas.gov/licensure/Pages/statistics.aspx

2010 Arkansas Youth Tobacco Survey: The Arkansas Youth Tobacco Survey is a school-based survey conducted every other year to assess the prevalence of tobacco-related behaviors among middle and high school students. The survey used a cluster sample design to produce a representative sample of students in grades 6 through 12 at the state level. http://www.healthy.arkansas.gov/programsServices/tobaccoprevent/Pages/DataReports.aspx

2010 Behavioral Risk Factor Surveillance Survey (BRFSS), Oral Health and Tobacco Use: During 2010, Arkansas participated with 53 other states and territories in the BRFSS, a telephone survey of randomly-selected households within the state. A total of 4,025 Arkansas adults were surveyed during 2010. National data collection instruments were used, including questions about oral health and dental hygiene behaviors. Interviews were administered using CATI technology and procedures. A complete description of procedures and findings (both state and national) is available on the website maintained by the Centers for Disease Control and Prevention. Oral health indicators are assessed every two years. State & U.S. Data: http://www.cdc.gov/brfss/ County Data: http://www.healthy.arkansas.gov/programsServices/healthStatistics/Brfss/Pages/CountyData.aspx

2010 Child (Third Grade) Screening: In 2010, a total of 4,239 children in 115 Arkansas public schools were screened for caries experience and sealant utilization. Screenings were completed in classroom settings by dental hygienists under contract to the ADH Office of Oral Health and its partners. A full report of procedures and findings can be obtained from the ADH Office of Oral Health. http://www.healthy.arkansas.gov/programsServices/oralhealth/Documents/ARSmiles.pdf
**2011-2012 Future Smiles Dental Clinic:** The Arkansas Department of Health, Office of Oral Health, and the University of Arkansas at Little Rock support the Future Smiles Dental Clinic. It is the only school-based dental clinic in an Arkansas elementary school. The clinic provides comprehensive dental care to children covered by Medicaid or those without insurance. Data about dental caries experience and sealant use are collected and analyzed annually. In 2012, 515 students received 1,385 dental sealants.

**2012 Arkansas Medicaid:** For children under age 21, dental care is covered for children with ARKids First-A and Medicaid. This includes orthodontic care, if needed for medical reasons. For adults, Medicaid will pay up to $500 a year for most dental care: [https://www.medicaid.state.ar.us/InternetSolution/general/reports.aspx](https://www.medicaid.state.ar.us/InternetSolution/general/reports.aspx)

**2008 Pregnancy Risk Assessment Monitoring System (PRAMS):** PRAMS collects population-based data on maternal attitudes and experiences prior to, during, and immediately following pregnancy. The PRAMS sample of women who have had a recent live birth is drawn from the state’s birth certificate file. A total of 2,262 women were surveyed. Selected women were first contacted by mail. If there was no response to repeated mailings, women were contacted and interviewed by telephone. PRAMS data allow CDC and decision-makers in Arkansas to monitor changes in maternal and child health indicators [e.g., unintended pregnancy, prenatal care (including dental care), breastfeeding, smoking, alcohol use, infant health]. [http://apps.nccd.cdc.gov/cPONDER/](http://apps.nccd.cdc.gov/cPONDER/)

**2010 Water Fluoridation Reporting System:** online tool that helps states manage the quality of their water fluoridation programs. WFRS information is also the basis for national surveillance reports that describe the percentage of the U.S. population on community water systems who receive optimally fluoridated drinking water. The system was developed by CDC in partnership with the Association of State and Territorial Dental Directors (ASTDD). [http://www.cdc.gov/fluoridation/statistics/2010stats.htm](http://www.cdc.gov/fluoridation/statistics/2010stats.htm)
Arkansas Office of Oral Health Sequencing of Activities

Collection, Analysis, & Dissemination of Data

A graphic indicating the anticipated sequence of activities in the process of maintaining the Arkansas Oral Health Surveillance System is presented below. Existing data are secured and analyzed, and gaps in knowledge are identified. To fill those gaps, primary data collection occurs with data analysis following. Using the data available from existing sources and from the data collection efforts, a report is written and disseminated to key stakeholder groups. The cycle of obtaining and analyzing data and updating and preparing new reports continues.

Within the Arkansas Office of Oral Health, this process has begun with the preparation of initial reports detailing the status of oral health in Arkansas and the preparation of this surveillance plan. As noted in the previous sections, the major sources of data for the Arkansas Oral Health Surveillance System are national. Two additional statewide data collection efforts will be necessary to maintain the system: 1) a screening of a representative statewide sample of children enrolled in third grade, to assess caries experience, untreated dental decay, and sealant placement; and 2) a telephone survey of a random sample of adults in the state, to assess routine care, oral hygiene, and dental insurance status for various age groups. This plan minimizes the cost of the system while providing essential data to monitor key indicators of oral health in Arkansas.

While the collection of existing and new data and analysis of those data are the cornerstones of the system, the preparation and dissemination of reports summarizing the findings are also essential activities. The distribution of timely information gleaned from surveillance activities is important to the inclusion of surveillance data in decision-making processes related to program design and implementation as well as policy-making. Thus, it is anticipated that an ongoing series of summary reports will be forthcoming from the system. This reporting series will include topical reports and fact sheets that target particular areas of emphasis for the Office of Oral Health, as well as the routine updating of the more comprehensive Oral Health in Arkansas document as new data become available within the system. To facilitate the timely dissemination of data, both print and electronic media will be used for report dissemination.
Surveillance Activities

2012-2016
Burden of Oral Disease in Arkansas, 2013

A requirement of the Office of Oral Health grant from the Centers for Disease Control and Prevention (CDC) is the dissemination of a “burden document.” The burden document is intended to be a one-stop data set for oral health indicators in the state. The report summarizes what is known about oral health among Arkansans, presenting the most current information available. It also addresses racial disparities, and discusses preventive strategies, access to care, and relevant public health policies. Comparisons are made to national data whenever possible, and to Healthy People 2020 goals when appropriate. It is hoped that the information can raise awareness of the need for continued vigilance and intervention in the area of oral health and guide prevention and treatment efforts across the state.

Data from a wide variety of sources, including open-mouth surveys and telephone surveys were compiled to give an overview of oral health status. Once complete, the document will be available from the Office of Oral Health website:

[http://www.healthy.arkansas.gov/programsServices/oralhealth/Pages/default.aspx](http://www.healthy.arkansas.gov/programsServices/oralhealth/Pages/default.aspx)

This report will be updated every five years when new data becomes available, and will be disseminated to stakeholders, Arkansas Oral Health Coalition, Association of State and Territorial Dental Directors (ASTDD), and systematically reported to the CDC Division of Oral Health through the National Oral Health Surveillance System.
Basic Screening Survey: Oral Health Surveillance among Older Adults in Arkansas, 2012-2013

Unmet dental needs among older adult residents in long term care facilities are common nationwide.¹ Because of this concern, an open-mouth screening survey was conducted by the Office of Oral Health in April, 2012 to determine the current status of oral health among older adults aged 60+ in nursing home and Area Agency on Aging (AAA) facilities in Arkansas.

Older Arkansans make up a growing proportion of our population. According to the 2010 census, persons aged 65 and older represent 14.4 percent of the total population in Arkansas.² The Arkansas Behavioral Risk Factor Surveillance System (BRFSS) survey provides the only data on the status of oral health among the general population of older adults in the state. During the 2010 survey year, 23.3 percent of Arkansans aged 65 and older no longer had any natural teeth (edentulous), while nationwide, 16.9 percent of adults aged 65 and older did not have any natural teeth.³

The recommended and optional oral health status indicators included in the open-mouth screening portion of the survey were determined by the Association of State and Territorial Dental Directors (ASTDD).

**Recommended Indicators**
- Dentures and denture use
- Number of natural teeth
- Untreated decay
- Root fragments
- Need for periodontal care
- Suspicious soft tissue lesions
- Urgency of need for dental care

**Optional Indicators**
- Substantial oral debris
- Severe gingival inflammation
- Severe dry mouth

A total of 10 licensed registered dental hygienists will be contracted to conduct the oral health screening. Education and training will be conducted by the Office of Oral Health staff using the ASTDD *Basic Screening Survey Tool:* [http://www.astdd.org/basic-screening-survey-tool/#adults](http://www.astdd.org/basic-screening-survey-tool/#adults).

Results of the survey will be released on the Office of Oral Health website: [http://www.healthy.arkansas.gov/programsServices/oralhealth/Pages/default.aspx](http://www.healthy.arkansas.gov/programsServices/oralhealth/Pages/default.aspx).

Additional Arkansas BRFSS Question Related to Dental Insurance Coverage, 2014

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys among adults (age 18 and older) that generates information about health risk behaviors, clinical preventive practices, and health care access and use primarily related to chronic diseases and injury. The Arkansas survey is conducted monthly with analysis of results annually. County-level estimates are available for the core indicators measured, including oral health measures. A total of 4,025 Arkansans were surveyed during 2010 when the most current oral health indicators were asked. Core indicators for the BRFSS survey include:

- Health Status
- Demographics
- Tobacco Use
- Diabetes
- Health Insurance
- Cancer Screening
- Women’s Health
- Oral Health
- Hypertension
- Alcohol Use
- Injury
- Cholesterol
- Physical Activity
- Fruits & Vegetable Intake
- BMI
- Cardiovascular Health

The BRFSS survey results are used to track health trends and compare these trends across states and the U.S. In addition, they can be used for program development and program evaluation. The core oral health questions asked every other year (even years) include:

- How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists.
- How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics. (If wisdom teeth are removed because of tooth decay or gum disease, they should be included in the count for lost teeth)
- How long has it been since you had your teeth cleaned by a dentist or dental hygienist?
Oral Health Dental Insurance Proposed State-Added Question

Dental insurance is a major instrument for ensuring access to dental care. The 2000 U.S. Surgeon General’s report on oral health reported that approximately 85 million individuals in the United States had no dental insurance. The BRFSS survey assesses the prevalence of medical insurance among the adult population annually, and Arkansas has a higher percentage of adults with no medical insurance compared to the U.S., see Figure 1.

![Figure 1: Percent of Arkansas Adults (18 - 64 years) with No Medical Insurance, Arkansas & U.S., 2011](image)

Because Arkansas adults lack of access to health care when compared nationally, the Office of Oral Health needs to gain a better understanding of dental health care access among adults in the state. Currently there is no indicator to measure dental insurance prevalence.

Contingent on funding, a proposal will be submitted for the following additional BRFSS question.

**Proposed Question**: Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?

Variable Name: DENTLINS
1=Yes
2=No
7=DK/NS (don’t know/ not sure)
9=Refused

For more information about the Arkansas BRFSS survey and available county-level data, see the ADH Health Statistics Branch website: [http://www.healthy.arkansas.gov/programsServices/healthStatistics/Brfss/Pages/CountryData.aspx](http://www.healthy.arkansas.gov/programsServices/healthStatistics/Brfss/Pages/CountryData.aspx)
In 2010, an open-mouth Basic Screening Survey (BSS) among third graders in Arkansas was completed to measure the prevalence of caries experience, untreated caries, and dental sealants in the state. Overall, among students surveyed aged 8-10 years: 64% had some evidence of dental caries, 29% had untreated caries, and 27% had some evidence of dental sealants on one or more tooth surfaces.

The sampling frame consisted of 503 public schools with a third grade class (list provided by the Arkansas Department of Education). If school districts covered more than one county they were assigned to a single county. Since funds were available to survey approximately 125 schools, with at least one participating school in each of the 75 counties, the remaining sample of 50 schools was allocated among counties in proportion to the number of schools in a county in excess of one. Once a sample size for each county had been computed, the SAS program, PROC SURVEYSELECT selected a simple random sample stratified by county. During analysis, the sample schools were weighted by the inverse of the probability of selection so that the sample represented all schools in the county when compiling state or regional statistics. A total of 10 licensed registered dental hygienists were contracted to conduct the screening. All were trained using the ASTDD Basic Screening Survey tools. For more information about the BSS Survey of Arkansas third graders, see the ADH Office of Oral Health website: (http://www.healthy.arkansas.gov/programsServices/oralhealth/Documents/ARSmiles.pdf).

To measure the five-year progress of the “Seal the State” program, a second BSS survey of Arkansas third graders will be conducted in 2015-2016.
Arkansas “Seal the State” Surveillance, 2013 – 2016

In 2007, a state sealant program was initiated with funding from the Daughters of Charity Foundation of Saint Louis, MO. The Daughters of Charity grant provided for the purchase of four complete portable dental units and support for the following three pronged program: 1) a pilot sealant program in Forest City, Arkansas; 2) a statewide educational and dental sealant awareness campaign with informational handouts, newspaper ads and radio advertisements; and 3) direct services to approximately 2000 children in a school-based setting across the state. This initial program was begun with the following goals in mind:

1) Evaluate the pilot program and its relation to the state dental sealant plan, including data from the SEALS software;
2) Develop and coordinate additional school-based dental sealant programs; and
3) Evaluate the state sealant program.

To sustain the newly established sealant program, the Office of Oral Health partnered with Arkansas Children’s Hospital (ACH). ACH continues to grow and develop the program, bringing the preventive benefits of dental sealants to thousands of underserved children across the state.

To further implement the plan, the Office of Oral Health has worked extensively with other partners in the Oral Health Coalition, both to implement the sealant program and assure its sustainability. In addition to Arkansas Children’s Hospital (ACH), three other partners, University of Arkansas at Little Rock (UALR) Children’s International Program; Community Health Center of Arkansas (CHC), Healthy Connections, in Mena, Arkansas; and the Interfaith Dental Clinic in Conway, Arkansas; have joined these efforts. Sealant activities from these four partners are evaluated and reported to the CDC Division of Oral Health annually.
ADH = Arkansas Department of Health, Office of Oral Health
ACH = Arkansas Children’s Hospital
UALR = University of Arkansas at Little Rock, Children’s International, Future Smiles Dental Clinic
CHC = Community Health Centers, Healthy Connections
Data Security: Procedures

These are the Office of Oral Health Branch internal security procedures to protect the confidentiality of Arkansas citizens. For more information, see http://www.healthy.arkansas.gov/aboutADH/Pages/HIPAA.aspx.

1. If in conflict, Arkansas Department of Health policies supersede those of the Office of Oral Health.
2. Written instructions are to be kept in each office (in office/job description manuals).
3. Items with individual identifiers are to be placed face down or in envelope while in office or transport.
4. Items with individual identifiers (e.g., surveys and electronic media) must be kept in a locked file cabinet when out of office or when not in current use.
5. De-identified survey data may be stored indefinitely as opposed to individual patient data.
6. After surveys are compiled and data have been de-identified, written copies of individual patient answers should be disposed of (shredded) within 90 days - this is a general rule; if in doubt, do not dispose of and discuss with the Director of the Office of Oral Health.
7. After surveys are compiled & data input on encrypted media, electronic copies of individual patient answers should be disposed of (CD/flash drive erased) within 90 days - this is a general rule; if in doubt, do not dispose and discuss with Director of the Office of Oral Health.
8. As data are often transferred among Arkansas Children’s Hospital, the University of Arkansas for Medical Sciences and the University of Arkansas at Little Rock/SEAL the State programs, written business agreements, memos of understanding and written protocols for transference of surveys/data may be required.
9. Prior to the Office of Oral Health accepting data contained on electronic media (flash drive or CD), such data must be placed on an encrypted device and the encryption key/password given verbally or via a separate email message.
10. Transference of data through email must be in the form of an encrypted file, not in the body of the email itself – just locking the file may not be sufficient – the password or encryption key must not be sent in the same email message but can be done so separately.
11. It should be remembered that though everyone may have individual responsibilities, HIPPA compliance is still a team effort and great care must be taken to protect individual patient information.
## Arkansas Population, 2010

<table>
<thead>
<tr>
<th>Total Population</th>
<th>2,915,918</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>49.1%</td>
</tr>
<tr>
<td>Female</td>
<td>50.9%</td>
</tr>
<tr>
<td><strong>Median Age</strong></td>
<td>37.4</td>
</tr>
<tr>
<td><strong>Age Distribution</strong></td>
<td></td>
</tr>
<tr>
<td>Under 5 years</td>
<td>6.8%</td>
</tr>
<tr>
<td>5 - 9 years</td>
<td>6.8%</td>
</tr>
<tr>
<td>10 -14 years</td>
<td>6.8%</td>
</tr>
<tr>
<td>15 -19 years</td>
<td>7.0%</td>
</tr>
<tr>
<td>20 - 44 years</td>
<td>32.3%</td>
</tr>
<tr>
<td>45 - 64 years</td>
<td>25.9%</td>
</tr>
<tr>
<td>65 - 84 years</td>
<td>12.7%</td>
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<tr>
<td>85+ years</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>77.0%</td>
</tr>
<tr>
<td>Black</td>
<td>15.4%</td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>6.4%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.2%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau