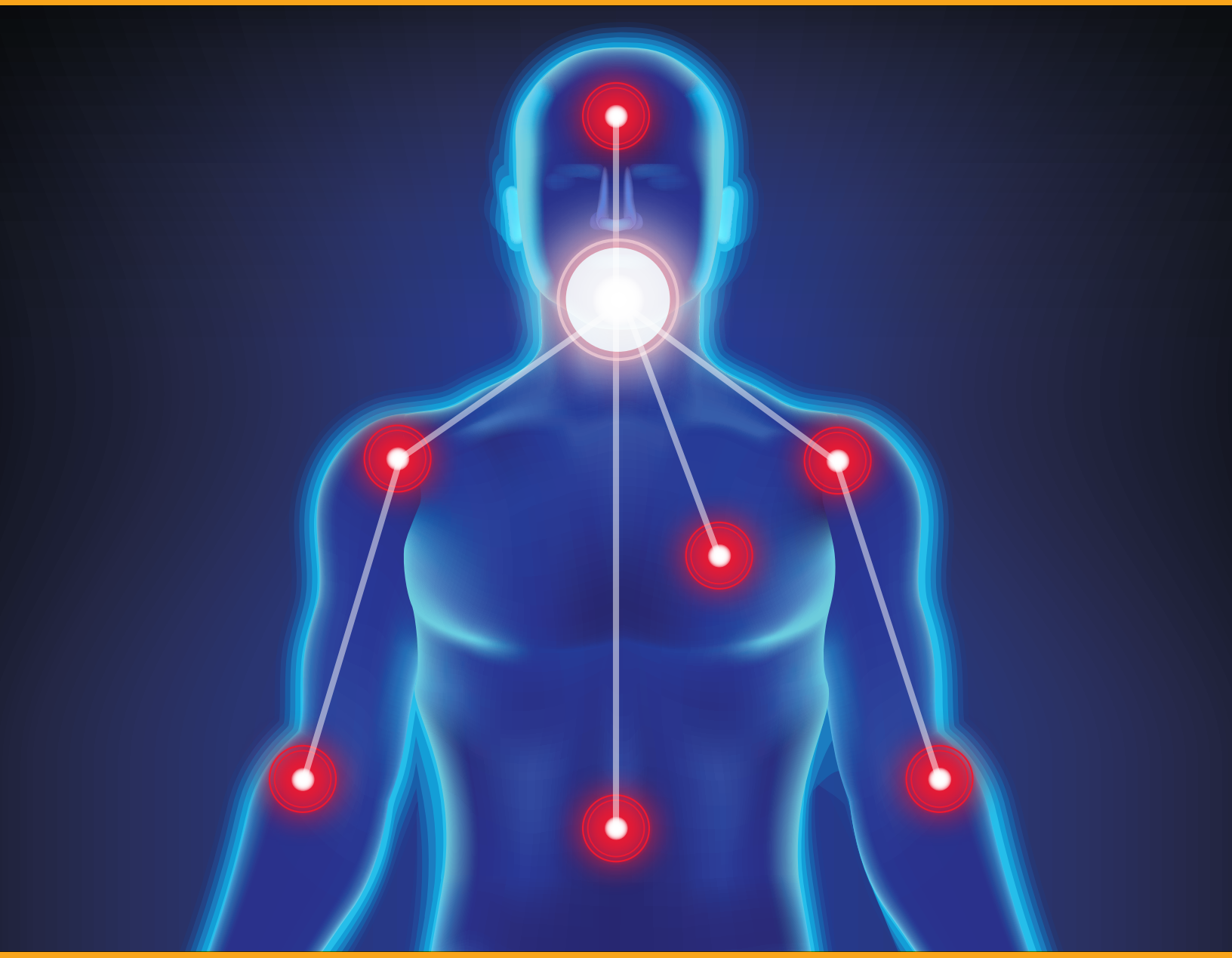
YOUR MOUTH YOUR HEALTH

The Connection of Oral Health to Overall Health



A State Oral Health Plan for All Alabamians 2018-2023

ALABAMA PUBLIC HEALTH

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

OHCA
ORAL HEALTH COALITION OF ALABAMA

In recognition of
unfaltering passion and commitment to the
betterment of the oral and overall
health of Alabama residents,
Alabama's very first
State Oral Health Plan
is dedicated to
Sherry Goode, RDH

Acknowledgements

Chris Haag, for his relentless pursuit of Alabama's first State Oral Health Plan
Dr. Stuart Lockwood, for being the "numbers guy"
Holly Calloway, for transforming concepts into a work of art

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American Dental Association
Alabama Medicaid Agency
Alabama Department of Public Health Oral Health Office
Members of Oral Health Coalition of Alabama

OHCA

ORAL HEALTH COALITION OF ALABAMA

ORGANIZATIONAL MEMBERS

- AJG Risk Management
- Alabama Chapter Academy of Pediatrics
- Alabama Dental Association
- Alabama Department of Children's Affairs / State Head Start Collaboration Office
- Alabama Department of Early Childhood Education
- Alabama Department of Education Career and Technical Education
- Alabama Department of Human Resources
- Alabama Department of Public Health / ALL Kids Program / CHIP
- Alabama Department of Public Health / Bureau of Family Health Services
- Alabama Department of Public Health / Office of Disease Control and Prevention
- Alabama Department of Public Health / Office of Oral Health
- Alabama Department of Public Health / Office of Primary Care and Rural Health
- Alabama Department of Public Health / Office of Women's Health
- Alabama Department of Public Health / WIC
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- Board of Dental Examiners of Alabama
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- Elmore County Technical Center
- HandsOn River Region / Pay It Forward
- Jefferson County Department of Health / Dental Program
- KidCheck Plus Sight Savers
- Montgomery District Dietetic Association
- Sarrell Dental/DentaQuest
- United Cerebral Palsy Greater Birmingham
- University of Alabama at Birmingham (UAB)
- UAB School of Dentistry
- UAB School of Dentistry / Department of Clinical and Community Science
- UAB School of Dentistry / Department of Pediatric Dentistry
- UAB School of Dentistry / General Practice Residency Program
- UAB School of Public Health
- USA Health Mitchell Cancer Institute

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#ALSOHP

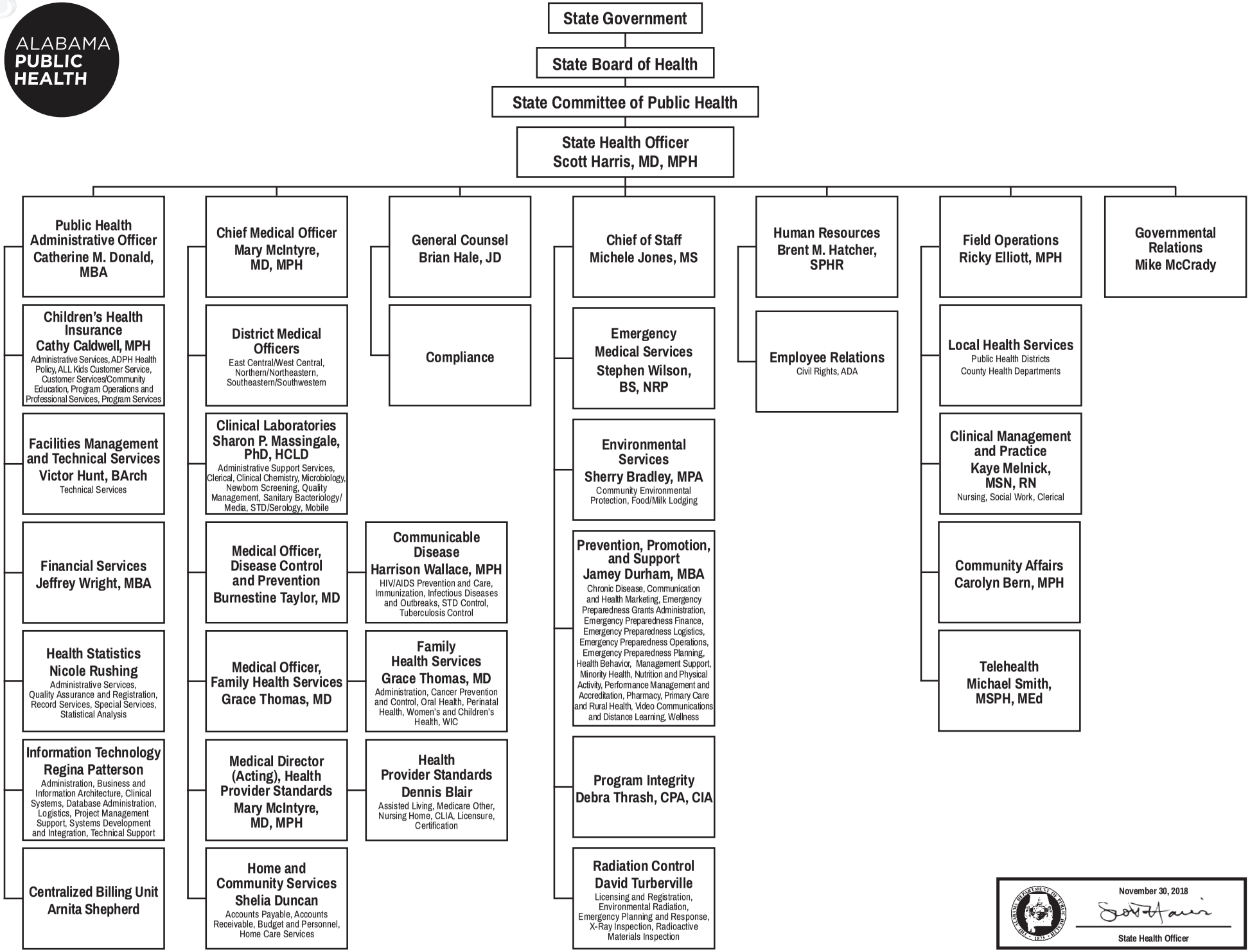
MISSION

The oral Health Coalition of Alabama (OHCA) promotes improved oral health, which impacts the overall health and well-being of Alabama residents through collaborative partnerships, education, advocacy, and technology.

VISION

ALL Alabamians will have access to oral health care that results in optimal oral health.

ALABAMA PUBLIC HEALTH



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Ruthie Spencer (RSE)

Assistant to Bureau Director
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Deanah Maxwell (PHPS)
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Vacant (Spec Inv Chief)
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April Johnson (ASA 2)

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Dechete Gordon (PHES)

Abbreviations:

ACCT - Accountant
ACCT Clk - Account Clerk
ASA - Administrative Support Assistant
AT - Account Technician
Cler Aide - Clerical Aide
CTR Sr - Certified Tumor Registrar Senior
DD - Dental Director
Epi - Epidemiologist
Epi Sr - Epidemiologist Senior
Epi Sup - Epidemiologist Supervisor
HSA - Health Services Administrator
MBS - Medical Care Benefits Specialist
NA - Nurse Administrator
NAA - Nutritionist, Assistant Administrator
NC - Nurse Coordinator
NM - Nurse Manager
NPD - Nurse Practitioner Director
NPS - Nurse Practitioner Senior
NS - Nurse Supervisor
Nutr A - Nutritionist, Administrator
Nutr Sr - Senior Nutritionist
PC-CE - Project Coordinator (Contract Employee)
PHE - Public Health Educator
PHES - Public Health Educator Senior
PHPD - Public Health Physician Director
PHPS - Public Health Physician Senior
PHRA - Public Health Research Analyst
PI Spec - Public Information Specialist
PM-CE - Project Manager (Contract Employee)
RDH - Registered Dental Hygienist
RSE - Retired State Employee
Spec Inv - Special Investigator
Spec Inv Chief - Special Investigator Chief
SR ACCT - Senior Accountant
St Clk - Stock Clerk
SPT - State Professional Trainee
Stu Aide - Student Aide
SW Sr - Social Worker Senior
SW Sup - Social Worker Supervisor
SWM - Social Worker Manager
TC - Training Coordinator

Grace H MD — September 16, 2019

Grace Thomas — Date

FROM THE STATE HEALTH OFFICER

Scott Harris, M.D., M.P.H.
STATE HEALTH OFFICER

November 5, 2019

Fellow Alabamians,

I am pleased to announce completion of Alabama's first State Oral Health Plan, an instrument that will provide guidance to navigate towards optimal oral health for all Alabamians.

Through a collaborative network between the Alabama Department of Public Health and the diverse membership of the Oral Health Coalition of Alabama, this comprehensive plan contains desired outcomes that are both attainable as well as sustainable. The plan will be the benchmark by which all future progress in oral health is based and compared within our state. The plan focuses on five primary goals:

- Increase access to healthcare
- Professional education and integration
- Health literacy
- Data and surveillance
- Prevention

With medicine's greater knowledge of the interdependence of oral health to overall systemic health, a more holistic approach can be considered with particular concentration on the oral cavity as the gateway to overall health.

The year 2020 will bring renewed interest regarding the importance of oral health. For only the second time in history, the Surgeon General's Report will emphasize the significance of oral health and its effect on the entire body. The implementation of the State Oral Health Plan coinciding with such an historic event will no doubt bolster awareness and generate excitement surrounding Alabama's new oral health initiatives and ultimately lead to improved overall health.

Sincerely,

Scott Harris, M.D., M.P.H.
State Health Officer

MAILING ADDRESS Post Office Box 303017 | Montgomery, AL 36130-3017
PHYSICAL ADDRESS The RSA Tower | 201 Monroe Street | Montgomery, AL 36104

alabamapublichealth.gov

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Accredited Health Department

FROM THE CHIEF MEDICAL OFFICER

Scott Harris, M.D., M.P.H.
STATE HEALTH OFFICER

November 5, 2019

Dear Fellow Alabamians:

I must first start with recognizing the great work of our State Dental Director, Dr. Tommy Johnson, and the members of the Oral Health Coalition of Alabama (OHCA). When this group was first convened in 2000, it had a very limited focus, to bring together a diverse, multi-disciplinary group from across the public and private sectors, to move forward an initiative named Smile Alabama.

Through the efforts of Dr. Johnson and his staff, OHCA and its dedicated members, Alabama is moving forward, and the coalition has been able to broaden its scope to include all Alabamians and not just children. A State Oral Health Plan for All Alabamians 2018-2023 not only documents the improvement in Alabama's ranking in America from fiftieth to twenty-ninth but identifies specific goals to achieve improved oral health.

The state of Alabama has come a long way since 2000 and while we still have a long way to go, we continue to move forward. This plan is a wonderful step in identifying the goals to further push us forward.

Sincerely,

Mary G. McIntyre, M.D., M.P.H.
Chief Medical Officer

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PHYSICAL ADDRESS The RSA Tower | 201 Monroe Street | Montgomery, AL 36104

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FROM THE STATE DENTAL DIRECTOR

Scott Harris, M.D., M.P.H.
STATE HEALTH OFFICER

November 5, 2019

Fellow Alabamians,

No matter the situation, we all have the fear of being "last." Failure is one of the most devastating situations in which to find one's self—but it can also be the impetus that results in transforming the darkest of days into renewed expectation.

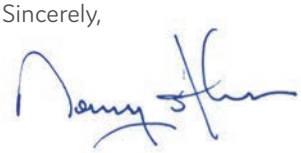
In 2016, the report, **"Oral Health America: *A State of Decay,*** was released. The report detailed contributing factors to adverse oral health among older Americans using five variables applied to each state: 1) Community Water Fluoridation, 2) Edentulism, 3) State Oral Health Plan, 4) Basic Screening Survey, and 5) Medicaid. Each state was subsequently ranked using standard scoring techniques resulting in a composite score of 0.0% for Alabama--a ranking of fiftieth in the nation. Clearly, intervention was necessarily imminent.

> *"Sometimes it is the people no one can imagine anything of who do the things no one can imagine."*
>
> *-Alan Turing*
>
> *The Imitation Game*

Creation of a State Oral Health Plan was identified as the most feasible first step in changing the ranking of Alabama. As a first-time dental director in October 2017, the formidable task took priority over all other responsibilities and became my primary focus. In anticipation of the next report being released in April 2018, the collaborative efforts of Alabama Department of Public Health and the Oral Health Coalition of Alabama culminated in Alabama's first State Oral Health Plan, consisting of five specific goals and the objectives and strategies to bring them to fruition. The countless hours of planning were recognized at the National Oral Health Conference in Louisville, Kentucky, on April 17, 2018, when the new ranking of twenty-ninth was revealed. Alabama garnered nationwide attention, acknowledging the newly created State Oral Health Plan that addressed the needs of all Alabamians' oral—as well as the related overall—health.

No doubt the results of the efforts put forth by all those involved in the creation of Alabama's Oral Health Plan will attest to the comprehensive nature of its design. It is a dynamic document, not intended to be static, but fluid so as to address the changing needs of a deserving population. It is a testament to the realization that we are capable of overcoming the seemingly insurmountable.

Sincerely,



Tommy Johnson, DMD, State Dental Director
Alabama Department of Public Health
Bureau of Family Health Services / Oral Health Office

SUMMARY OF BURDEN OF ORAL DISEASE IN ALABAMA, 2019

Pregnant women – 2015 PRAMS – 22.1% of pregnant women needed to see a dentist for a problem; 40.6% of pregnant women had a dental cleaning during pregnancy (24.6% did not think it was safe to have dental care during pregnancy)

Head Start – from AL Head Start program: 95% of AL Head Start preschool children received a dental exam in 2018; 37% needed dental treatment (compared to 26.6% nationally); 74% received dental treatment

Kindergartners – from 2011-13 statewide survey: 43% of AL Kindergarten children had experienced dental decay (had a filling or a cavity) by age 5; Among K children in AL schools where 75% of students were on free and reduced lunches some 57.5% % had experienced tooth decay, while among children in schools where less than 25% were on free and reduced lunch, only 24.2% had experienced tooth decay. Statewide, 20% (1 of every 5 Kindergarten children) had a cavity needing dental treatment.

Third graders – from 2011-2013 statewide survey: 58% of AL 3rd grade students (compared to 45% nationally) had experienced dental decay (had a filling or a cavity); 21% (1 of every 5 third grade children) had a cavity needing dental treatment (compared to 17% nationally). Among third grade children in AL schools where 50% or more of students were on free and reduced lunches some 39% had a cavity, while among children in schools where less than 50% were on free and reduced lunch, only 14.3% had a cavity.

Alabama Medicaid children – from 2017 Annual EPSDT data – In 2017, 720,000 of approximately 1.2 million children (58%) were eligible for Medicaid in AL. 323,000 of the 720,000 eligibles (44.8%) received a dental exam. 305,000 (42.3) received a preventive dental service, and 114,000 (35% of those who had a dental exam) received a dental treatment service.

Adult dental visits – from CDC BRFSS 2016 – Among AL adults in 2016, 62.3% had visited a dentist in the last year (66.4% nationally). Only 39% of those with less than a high school education had visited a dentist in the last year, while 79.4% of college graduates had done so.

Adult tooth loss – from CDC BRFSS 2016 – Among AL adults in 2016, 52.1% had at least one tooth extracted (43.1% nationally). Among major AL cities, this figure ranged from a high of 55.8% in Mobile to 42.5% in Huntsville. Among AL seniors (65+ years of age) in 2016, 14.2 % had no teeth (compared to 18.4% nationally). In 2004, this figure was 33%, a significant improvement. While only 4.3% of AL seniors with a college degree had no teeth in 2016, 34.1% of AL seniors without a high school degree had no teeth.

SUMMARY OF BURDEN OF ORAL DISEASE IN ALABAMA, 2019

Adult periodontal disease – from CDC data – The only data available for periodontal disease among AL adults 30+ years of age indicates that 10% have severe periodontal disease (8.5% nationally). Among US adults 30+ years of age, 47% have periodontal disease (8.7% mild, 30.0% moderate and 8.5% severe). Nationally, total periodontal disease among smokers is 64% and 40% in non-smokers, and 67% among those with less than a high school education and 39% among those with some college.

Older adult oral health – from UAB School of Dentistry Survey 2017/2018 – among Jefferson county residents of senior centers selected by Middle Alabama Area Agency on Aging, the survey found that 33% of residents had an upper denture, 25.4% had a lower denture, 46% had untreated decay, and 37% needed periodontal care.

Oral Cancer – from variety of sources -- Alabama ranks fifth in the U.S. for oral cavity and pharynx cancer incidence and has the fourth highest incidence rate of oral cavity and pharynx cancer. Alabama is seventh among the states for oral cavity and pharynx cancer deaths and has the sixth highest mortality rate of oral cavity and pharynx cancer. 31.3% of cancer deaths in Alabama are attributable to smoking, and tobacco smokers are at increased risk of oral cancer, and Alabama ranks tenth worst in the U.S. for tobacco use: 20.9% of Alabama adults and 14% of teens smoke cigarettes, 4.9% of adults and 24.5% of teens use e-cigarettes or vape, and 3.7% of Alabama adults and 12.5% of teens use smokeless tobacco.

Fluoridation – 78% of all persons with community water sources in AL receive fluoridated drinking water. 14 of 67 AL counties have less than 25% of their population receiving community water fluoridation. 15 counties have 50-74% of their county's population receiving fluoridated drinking water, and 27 counties have 100% of their residents receiving fluoridated water. Among kindergartners in AL schools where the county is 66% fluoridated or above, only 16% have untreated decay and 3.9% have an urgent treatment need, compared to 26% with untreated decay and 7.3% with an urgent treatment need among children in schools where their county is less than 33% fluoridated.

Sealants – Among AL 3rd grade children, 29% of children have received a dental sealant on a molar tooth. This compares to 30% nationally. Among AL 3rd grade children with a dental sealant, only 10 % have a cavity, compared to 25% of third graders who do not have a sealant. Also, among those children with a dental sealant, only 1.8% have an urgent dental treatment need, compared to 6.3% who do not have a dental sealant.

Workforce – from variety of sources – ADA HPI data for 2108 indicates AL has the lowest dentist to population ratio (41.4 dentists per 100,000 population) in the nation (60.1 dentists per 100,000 population). Further, due to dental school enrollment policies from mid 1970s to mid 1980s, some 34% of all AL practicing dentists are 60 years of age or older. Among 41 of our 67 rural counties, some 42% of all practicing dentists are 60+ years of age, and among our 25 smallest counties over 50% of all dentists (52%) are 60+ years of age. Strategies to address a pending shortage of dentists in AL, particularly in rural areas, are needed.

Alabama's Big Leap in 2018 State Rankings

No one would have been surprised if the state in last place in the 2016 *A State of Decay* report rankings, and which tied for 48th place in 2013, were still at the bottom in 2018. After all, Alabama seemingly has many challenges: Not a single adult dental benefit in Medicaid and little support for expansion of the program, large rural swaths throughout the state, and an outlook on aging that losing your teeth is just like death and diabetes — something everybody is going to face.

Thanks to the efforts of state public health officials and motivated faculty members, students, and alumni at the University of Alabama at Birmingham (UAB) School of Dentistry, the state climbed nearly 20 places in the 2018 list and is setting the stage at the local level for further improvements by changing access, attitudes, and assumptions among the people of the state.

"The impetus for us to take action was the previous *A State of Decay* report," said Conan Davis, DMD, the former state dental director who is now Assistant Dean for Community Collaborations and Public Health, Associate Professor in the Department of General Dental Sciences, and Division Head for Behavioral and Population Sciences at UAB. "We were all alarmed."

Working with many stakeholders and partners — including UAB School of Dentistry, some 17 federally qualified health centers (FQHCs) from across the state, the DentaQuest Foundation, the Alabama Dental Association, and Alabama Senior Services — the Alabama Department of Public Health created a new State Oral Health Plan (SOHP) with SMART objectives for older adults and has committed to goals in five key areas:

- Increase access to oral health care
- Professional education and integration
- Improve health literacy
- Capture better data and surveillance capabilities
- Focus on prevention of oral disease

The Cotton State is already putting their plan into action. Using grant-funded portable dental equipment, UAB dental professor Lillian Mitchell, DDS, MA, has launched outreach programs to provide cleanings where the people are – which in some cases means in their homes for those who are bedbound – and a curriculum to educate older adults on the oral-systemic links.

The Alabama Department of Public Health created a new State Oral Health Plan (SOHP) with SMART objectives for older adults and has committed to goals in five key areas.

The Alabama State Commissioner for Senior Services funds additional trips for Mitchell and dental students to provide care at rural senior centers across the state to provide oral health education, dental screenings (including the BSS for older adults), and dental cleanings using the portable equipment.

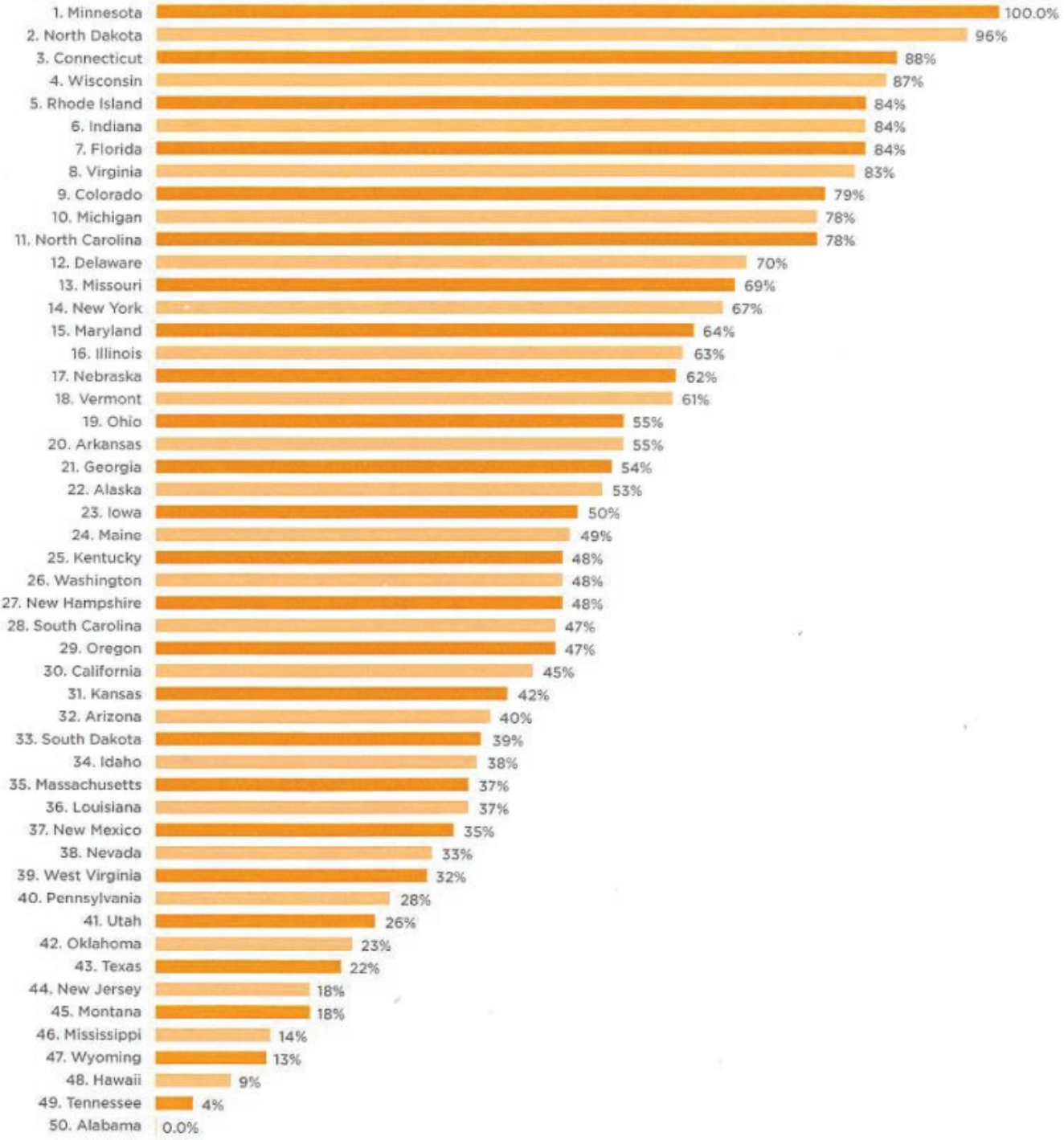
"It's not just how to brush your teeth – that's the least of my concerns, honestly," said Mitchell, who is Director of Geriatric Dentistry at the school. "I want these older people to understand the oral–systemic links. They're getting the message, and that's really what has prompted people to call us for repeat appointments. They say, 'I want to continue this and to take care of myself.'"

These kinds of efforts have been life-changing for some students who have never seen such poverty and living conditions, Mitchell added. Senior UAB dental students rotate through FQHCs, and all students pitch in with alumni to help in the School's annual Day of Dentistry where some 500 people receive free care.

The program is continuing to expand throughout the state, including more of its most rural and vulnerable areas. "We never know where we are going to end up," Mitchell adds. The same might be said of the state of Alabama – with dedication like this, who knows how much further they will climb in the next volume of *A State of Decay*.

*Dr. Conan Davis retired from UAB in July 2019.

ORAL HEALTH IN AMERICA: A STATE OF DECAY 2016



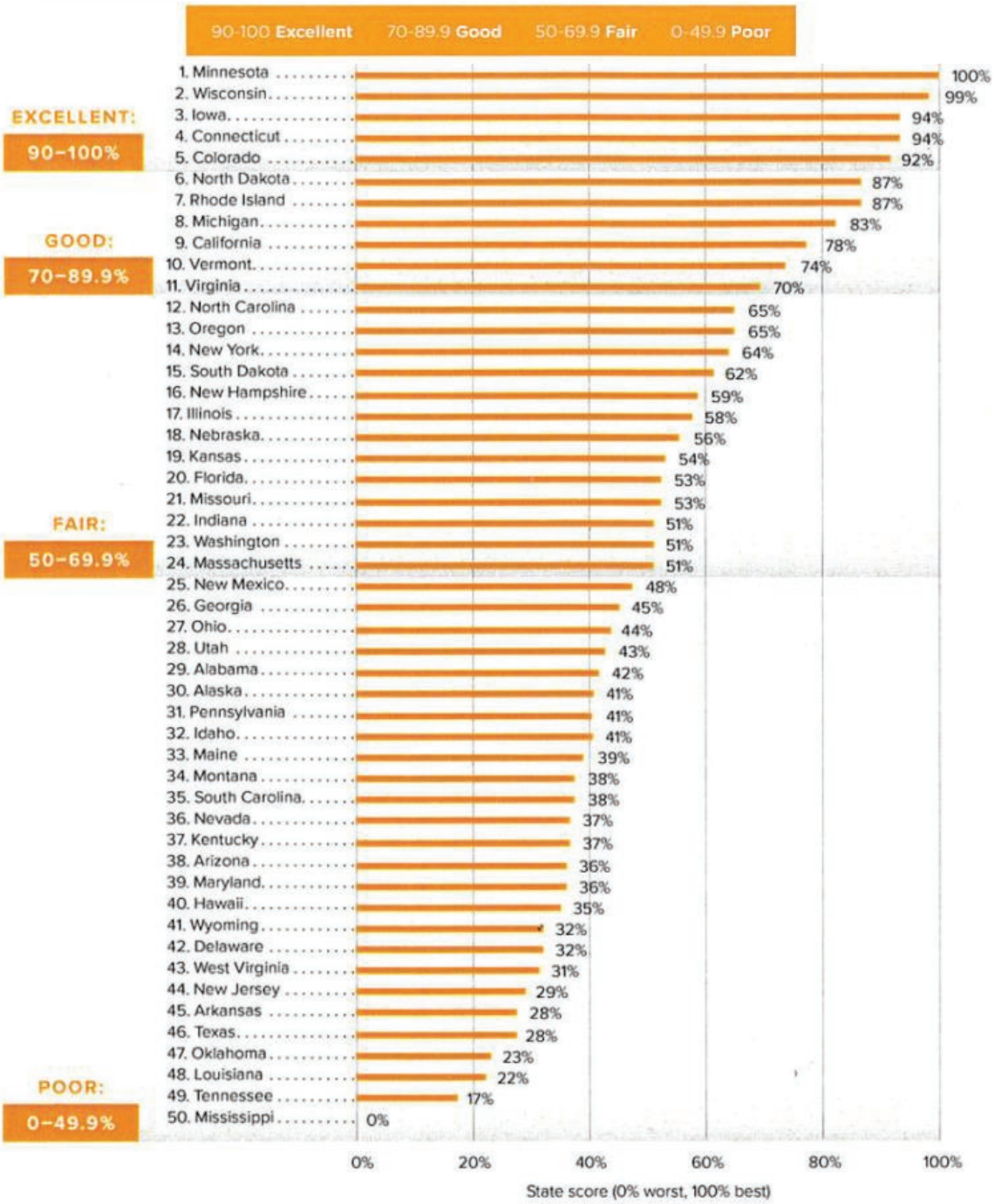
#50 RANKING CITED:

No Medicaid for older population

No Basic Screening Survey for older population

No State Oral Health Plan

ORAL HEALTH IN AMERICA: A STATE OF DECAY 2018



#29 RANKING CITED:

Basic Screening Survey for older population

State Oral Health Plan with **SMART** objectives Including older population

Specific
Measurable
Achievable
Relevant
Time-based

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

In the year 2000, the Surgeon General's Report acknowledged the fact that oral health plays an integral part in the overall general health and well-being of all Americans. For the first time, the significance of oral health and its effect on the entire body was brought to the forefront. The oral cavity became referred to as the "gateway of the body", sensing and responding to the external world and at the same time reflecting upon what is happening deep inside the body. This validation of the importance of oral health gave way to major findings:

- Oral diseases and disorders in and of themselves affect health and well-being through life.
- There are safe and effective measures to prevent the most common dental diseases—dental caries and periodontal diseases.
- Lifestyle behaviors that affect general health such as tobacco use, excessive alcohol use, and poor dietary choices affect oral and craniofacial health as well.
- There are profound and consequential oral health disparities within the American population.
- More information is needed to improve America's oral health and eliminate health disparities.
- The mouth reflects general health and well-being.
- Oral diseases and conditions are associated with other health problems.
- Scientific research is key to further reduction in the burden of diseases and disorders that affect the face, mouth, and teeth.

Seventeen years later, continued breakthroughs supporting the impact of oral health on virtually every bodily system continue to emerge and astound.

Armed with this knowledge, the Alabama Department of Public Health (ADPH) and the Oral Health Coalition of Alabama (OHCA) collaborated, along with numerous stakeholders, to devise a plan that would help achieve optimal oral health for the citizens of Alabama. The plan necessitated recognition that certain disparities created barriers hampering particular segments of the population from attaining the goals set forth. Socioeconomics, ethnicity, race, disabilities, age, location, pregnancy—these were disparities of great concern when considering the plan and its implementation. With those in mind, it was decided that Alabama's State Oral Health Plan should focus on these specific goals:

1. **Increase Access to Oral Health Care**
2. **Professional Education and Integration**
3. **Health Literacy**
4. **Data and Surveillance**
5. **Prevention**

By utilizing the collective data contained within this plan, the ultimate goal of optimal oral health can be achieved. It is a template to help navigate and overcome the myriad of disparities that present themselves to countless citizens of the state of Alabama. It is the path to the gateway of both oral and overall health.

"The past half century has seen the meaning of oral health evolve from a narrow focus on teeth and gingiva to the recognition that the mouth is the center of vital tissues and functions that are critical to total health and well-being across the life span." Oral Heath in America: A Report of the Surgeon General 2000

ALABAMA'S SOHP:
The Framework

ALABAMA'S SOHP: *The Framework*

"We will start with a framework." Those words became the inspiration for a group of individuals to produce a state oral health plan designed to convey the vision for the oral and overall health and well-being of the citizens of the state of Alabama. A very simple 6-word sentence that ideally should have transformed into a finished product – and that it did.

On November 9, 2017, an Oral Health Coalition of Alabama (OHCA) workgroup met in Birmingham, Alabama. The purpose of the meeting was to conceptualize the "framework" for the State Oral Health Plan (SOHP) for Alabama. The final product being designed would act to serve as the benchmark for the 5-year timespan 2018-2023. The workgroup consisted of representatives from Alabama Medicaid, the Alabama Dental Association (ALDA), the University of Alabama at Birmingham School of Dentistry (UABSOD), CHIP/ALL Kids, the Academy of Pediatric Dentistry, federally qualified health centers, special needs populations, older adults, Alabama Department of Public Health (ADPH) office staff, and other stakeholders.

Upon completion of the initial framework, input from ancillary sources resulted in numerous revisions and ultimately, the final plan. Far from a static document, as additional statistics and data become available the plan will be reevaluated so as to allow the S.M.A.R.T. (Specific, Measurable, Achievable, Realistic, Timed) Objectives to be modified accordingly. While the Oral Health Office of ADPH assumes lead role in managing and reporting progress and changes to the plan, OHCA serves as the place of central coordination and communication. The success of the plan requires fulfillment of specific goals by the respective organizations (i.e., ADPH, ALDA, UABSOD, various stakeholders, etc.) for implementation as well as to realize and perpetuate the plan's goals.

The collaborative efforts of a much-appreciated multitude of entities has resulted in Alabama's first comprehensive state oral health plan bringing with it a sense of great accomplishment and great promise.

frame•work

/frām•wərk/ - a basic conceptional structure (as of ideas): a skeletal, openwork, or structural frame.

ALABAMA ORAL HEALTH PLAN STAKEHOLDER CONCENTRATIONS

In order to successfully attain the desired goals set forth, various stakeholders must accept culpability in the implementation of the strategies within the plan. Many of the strategies will require collective efforts due to their inherent complex nature. The convergence of accountability is evident, therefore demonstrating a need for strategic coordination and collaboration among stakeholders.

Coalitions/Councils

Statewide or local alliances that foster collaborations between oral health advocates

Community-Based Organizations

Public or private organizations that are engaged in providing care within a community

Government and Policymakers

People, groups, and agencies who influence federal, state, and local laws, policies, and funding

Professional Organizations

Associations or societies who seek to further a particular profession, the interests of individuals engaged in the profession, and the public interest related to that profession

Providers

Individual health care professionals responsible for delivering health services

Public Health Agencies

State, county, or local agencies tasked with promoting or protecting public health

Educators

Providers of oral health or general health information or training to the public or to medical professionals

ALABAMA 5-YEAR STATE ORAL HEALTH PLAN 2018 – 2023

GOAL 1: Increase Access to Oral Health Care

By September 30, 2023, increase access to oral health care among underserved and/or hard to reach populations.

Objective 1.1: Decrease the proportion of young adults, adults, and older adults who are without dental insurance and increase the utilization rate by those with dental insurance.		
	1.1.1	Promote adult oral health benefits in the Alabama Medicaid and the Medicare Programs.
	1.1.2	Expand efforts to insure persons without dental coverage.
	1.1.3	Use public service announcements and other innovative outreach methods (e.g., social media, Alabama Department of Public Health video production studio, distance learning, and telehealth resources) to educate the public on the benefits of dental care and insurance.
	1.1.4	Influence decision makers to affect policy. 1.1.4.a Influence the public 1.1.4.b Increase access to care

Objective 1.2: Reduce the proportion of children, young adults, adults and older adults who experience difficulty, delays, or barriers to receiving oral health care.		
	1.2.1	Add questions to existing surveys (Behavioral Risk Assessment Surveillance System - BRFSS, MCH 5-year Needs Assessment, other) on barriers to accessing oral health care.
	1.2.2	Educate policy decision makers using GIS mapping and other resources.
	1.2.3	Incentivize providers to establish practices in dental shortage areas across the state (loan repayment programs, legislative funding for rural scholarships, etc.).
	1.2.4	Increase the establishment and utilization of Board of Dental Examiners of Alabama approved workforce and delivery models in rural dental shortage areas.
	1.2.5	Develop and distribute resources to publicize and promote oral health professions in Jr. High – High School, colleges, and universities statewide.

Objective 1.3: Increase the proportion of infants, children, adults, and older adults who received comprehensive dental services during the past year.		
	1.3.1	Create a communication plan to educate parents and caregivers on the importance of a dental home for infants, children, and young adults.
	1.3.2	Use public service announcements and other innovative outreach methods such as social media to educate the public on the benefits of dental care beginning at age one and continuing to the end of life.
	1.3.3	Use public service announcements and other innovative outreach methods to educate Alabama Medicaid and ALL Kids recipients on the benefits of utilizing these dental programs.

Objective 1.4: Increase the proportion of persons with disabilities who received comprehensive dental services during the past year.		
	1.4.1	Support the inclusion of dental benefits for Medicaid eligible special needs adults.
	1.4.2	Create and maintain a list of dental providers who understand the complex treatment needs and are comfortable providing care for persons with disabilities.
	1.4.3	Increase the number of organizations that represent individuals with disabilities (e.g., mental health, developmental disabilities) on the Oral Health Coalition of Alabama.
	1.4.4	Expand continuing education opportunities that provide training for all dental professionals on the complex treatment needs of persons with disabilities and the aging population.

Objective 1.5: Increase the proportion of pregnant women who received comprehensive oral health care during pregnancy.		
	1.5.1	Promote oral health awareness and dental visits during pregnancy through the Alabama Perinatal and WIC Programs.
	1.5.2	Promote oral health awareness and the importance of dental visits during pregnancy through County Health Departments and other non-profit programs that provide Maternity Care Coordination for at-risk pregnant women.
	1.5.3	Use marketing campaigns (billboards, free magazines, floor clings, etc.) to promote dental visits during pregnancy and increase awareness in underserved areas.
	1.5.4	Educate obstetricians and providers of prenatal services on the importance of good maternal oral health.
	1.5.5	Promote and increase access of oral health services by dental providers. 1.5.5.a Increase the number of dental providers providing care to pregnant women. 1.5.5.b Provide continuing education programs to educate dental providers on the importance and safety of dental visits during pregnancy.

GOAL 2: Professional Education and Integration

Professional Integration is the management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs, over time and across different levels of the health system.

By September 30, 2023, enhance professional integration between oral health providers, medical providers and social services providers across the lifespan.

Objective 2.1: Increase the number of medical providers and social services providers who promote oral health initiatives (education, prevention, dental visits) through their practices.		
	2.1.1	Support efforts to maintain the highest quality of dental professional education in Alabama. 2.1.1.a Assure adequate funding for dental schools. 2.1.1.b Educate policy makers on the cost of dental education and on state funding issues.
	2.1.2	Expand the partnership between the Academy of Pediatric Dentistry (AAPD) and the Academy of Pediatricians (AAP) (e.g., 1st Look, Brush/Book/Bed, other).
	2.1.3	Promote oral health through charity organizations or programs for at-risk populations (e.g., Gift of Life, Pay-It-Forward, etc).
	2.1.4	Increase oral health activity through Federally Qualified Health Centers (FQHCs), Community Health Centers (CHCs), and other facilities or programs with or without dental clinics onsite.

Objective 2.2: Increase the number of educational opportunities that allow oral health and other health care providers to work as a single team to address patient health care needs.		
	2.2.1	Create, maintain, and distribute a list of higher education interprofessional training opportunities.
	2.2.2	Increase the number of dental residency programs that offer interprofessional experiences for their residents.
	2.2.3	Promote the free online continuing medical education activities that teach practical oral health knowledge and skills available at http://www.smilesforlifeoralhealth.org/.

Objective 2.3: Increase the number of programs that educate oral health providers on the social determinants of oral health among underserved populations.		
	2.3.1	Ensure that continuing education opportunities include information on the impact of social determinants on oral health.
	2.3.2	Ensure dental school curricula and continuing education courses identify and address the medical/oral health needs of underserved populations (older adults, pregnant women, Hispanics, Native Americans, others).

GOAL 3: Health Literacy

Health literacy is the ability to obtain, understand, and use health information to make appropriate decisions for improved health.

By September 30, 2023, increase knowledge and awareness of the importance of oral health to overall health among health professionals, policy makers, and consumers.

Objective 3.1: Develop and promote consistent messages to educate providers and consumers on oral health through the internet.		
	3.1.1	Conduct a statewide poll to assess consumer knowledge of oral health and its relevance to overall health, including the growing concerns of HPV and its link to oropharyngeal cancer.
	3.1.2	Based on the results of the statewide consumer knowledge poll, create a section on the ADPH and Oral Health Coalition of Alabama websites to address oral health common myths.
	3.1.3	Include oral health communications in existing social media outlets (Facebook, newsletters, etc.) and link existing outlets to the website.
	3.1.4	Identify a website manager that updates the website/educational Information and tracks the various stakeholder educational activities.

Objective 3.2: Increase the number of programs and/or interventions that educate parents on how to prevent early childhood caries among children aged 0 – 3.		
	3.2.1	Develop messages for pregnant women and community organizations that serve children on oral health preventive measures.
	3.2.2	Promote fluoride varnish as an early prevention strategy which can be implemented by medical and dental providers.

Objective 3.3: Increase consumer and health care provider use of evidence-based prevention strategies.		
	3.3.1	Provide information to all health care providers and consumers about the evidence-based oral and systemic links affecting general health.
	3.3.2	Partner with local stakeholders to develop and deliver consistent messages on how to prevent oral cancers including HPV related oropharyngeal cancer.
	3.3.3	Promote school-based and community-based dental sealant programs.
	3.3.4	Work with municipal leaders, local water boards, community leaders and local consumers to promote and expand community water fluoridation within public water systems.
	3.3.5	Provide periodic (annual or biennial) statewide conferences for water plant managers and other key employees who provide community water fluoridation.
	3.3.6	Partner with the League of Municipalities, Alabama Association of County Commissions, and other key organizations to promote community water fluoridation.
	3.3.7	Establish legislation that promotes community water fluoridation.

Objective 3.4: Create and support county advocacy networks across the state of Alabama.		
	3.4.1	Recruit or identify an Oral Health champion in each legislative district such as the ALDA Dental Professional initiative that identifies a dentist in each legislative district that maintains contact with his/her legislator.
	3.4.2	Maintain relationships with state legislators and other state officials so that they understand the importance of good oral health and its connection to good overall health.

Objective 3.5: Collaborate with Alabama's public school systems statewide to increase oral health awareness activities.		
	3.5.1	Integrate messages about oral health throughout the K-12 school environment (e.g., vending machines, sports events, flyers, posters).
	3.5.2	Partner with the school nurses association, Parent Teacher Association (PTA), and other education advocates to integrate the importance of oral health into the school setting.
	3.5.3	Educate school nurses, teachers, and parents on evidence-based prevention programs such as dental sealants.
	3.5.4	Partner with local and district dental societies and other local dental programs (e.g., Sarrell Dental, FQHC staff) to provide classroom oral health presentations for students and parent presentations at PTA meetings.

Objective 3.6: Collaborate with public and private organizations serving adult and older adult persons to increase oral health awareness activities.		
	3.6.1	Partner with the Alabama Department of Senior Services to promote oral health.

Objective 3.7: Promote cessation of over-prescribing opioids to patients by following newest ADA guidelines.		
	3.7.1	Require dentists to continue their education on prescribing opioids and other controlled substances.
	3.7.2	Limit the prescribing of opioids to a 7-day period for acute pain.
	3.7.3	Encourage all dentists to use the Prescription Drug Monitoring Program (PDMP).

GOAL 4: Data and Surveillance

By September 30, 2023, provide continuous, systematic collection, analysis and interpretation of oral health data for the planning, implementation, and evaluation of oral health needs for all populations throughout the state.

Objective 4.1: Provide oral health data collection on school-aged children through cooperative agreements with Alabama public school systems, non-profit dental providers, private dental providers and others.		
	4.1.1	Conduct a statewide Basic Screening Survey (BSS) for Kindergarten and 3rd grade children at least every 5 years.
	4.1.2	Collaborate with other dental programs (non-profit, private practice dentists) that currently collect oral health data on school-aged children (using the BSS screening tool) and pursue oral health data sharing agreements.

Objective 4.2: Collect oral health data on older adults through older adult centers, long term care programs, assisted living, and other designated older adult programs/facilities that serve person >65 years of age.		
	4.2.1	Conduct a statewide BSS for older adults at least every 5 years.
	4.2.2	Collect area wide BSS for older adults through partnership between UABSOD Geriatric Dentistry Program and Alabama Department of Senior Services.
	4.2.3	Add dental questions on the number of older adults with no teeth and questions linked to other older adult diseases that correlate with dental disease (e.g., diabetes, hypertension) to the CDC Behavioral Risk Factor Surveillance System (BRFSS) report.
	4.2.4	Access oral cancer data on senior adults through Alabama Cancer Registry.
	4.2.5	Access craniofacial, cleft lip, and cleft palate data.

Objective 4.3: Increase data collection of at-risk pregnant women accessing dental services during pregnancy.		
	4.3.1	Pursue data sharing of pregnant women accessing dental services with Alabama Medicaid.
	4.3.2	Increase dental questions pertaining to dental visits during pregnancy through the Pregnancy Risk Assessment Management Survey (PRAMS).
	4.3.3	Continue collecting dental visit data through select ADPH county health department social workers who provide maternity care coordination.

Objective 4.4: Increase data collecting and reporting on Community Water Fluoridation (CWF) through the ADPH Office of Oral Health.		
	4.4.1	Collect and enter monthly CWF data in the CDC Water Fluoridation Reporting System (WFRS).
	4.4.2	Increase the collection and submission of split sample reports by County Health Department environmentalists.
	4.4.3	Assure timely submissions of Monthly Operational Reports to the Office of Oral Health through email communication with fluoridating water system staff.

GOAL 5: Prevention

By September 30, 2023, establish and implement pre-emptive measures intended to alleviate the circumstances associated with compromised oral health.

Objective 5.1: At local levels, maintain/build relationships with community-based organizations to support the implementation of evidence based oral health initiatives that prevent dental disease (e.g, community water fluoridation, dental sealants, fluoride varnish, oral/systemic links to general health).		
	5.1.1	Provide visits (ADPH and partners) to fluoridated and non-fluoridated water systems statewide to promote fluoridation and ensure monitored data is submitted to CDC.
	5.1.2	Collaborate with the Alabama Department of Environmental Management (ADEM), the Alabama Rural Water Association, the Alabama Rural Health Association and other agencies/organizations to promote the benefits of community water fluoridation.
	5.1.3	Develop and maintain a toolkit of resources to aid communities in supporting community water fluoridation.

Objective 5.2: Develop and implement school-based oral health prevention programs.		
	5.2.1	Provide school-based dental sealants programs in select school systems statewide.
	5.2.2	Provide fluoride varnish applications for at-risk young children (e.g., Head Start, Early Head Start, Pre K programs).

Objective 5.3: Promote the use of Silver Diamine Fluoride (SDF) in select, underserved communities.		
	5.3.1	Apply newly approved products/techniques to prevent and/or arrest dental decay.

Objective 5.4: Educate medical providers in preventive benefits of fluoride varnishes in underserved areas.		
	5.4.1	Encourage the placement of fluoride varnishes by pediatricians and other certified non-dental professionals for patients up to 36 months through the Alabama Medicaid 1st Look program.

Objective 5.5: Promote preventive measures to dentists, medical providers, parents, and children related to contracting HPV.		
	5.5.1	Recommend HPV vaccine at age 11-12 years for boys and girls, although a range from 9-26 years of age is acceptable.
	5.5.2	Design and disseminate pamphlets to educate schools, parents, children, dentists, and other medical providers in ways to prevent contracting HPV thus decreasing risk of oropharyngeal cancer.

GOAL 1:
Increase Access to Oral Health Care

GOAL 1: *Increase Access to Oral Health Care*

By September 30, 2023, increase access to oral health care among underserved and/or hard to reach populations.

Objective 1.1 **Decrease the proportion of young adults, adults, and older adults who are without dental insurance and increase the utilization rate by those with dental insurance.**

1.1.1 Promote adult oral health benefits in the Alabama Medicaid and the Medicare Programs.

1.1.2 Expand efforts to insure persons without dental coverage.

1.1.3. Use public service announcements and other innovative outreach methods (e.g., social media, Alabama Department of Public Health video production studio, distance learning, and telehealth resources) to educate the public on the benefits of dental care and insurance.

1.1.4. Influence decision makers to affect policy.
1.1.4.a Influence the public
1.1.4.b Increase access to care

Objective 1.2 **Reduce the proportion of children, young adults, adults and older adults who experience difficulty, delays, or barriers to receiving oral health care.**

1.2.1 Add questions to existing surveys (Behavioral Risk Assessment Surveillance System - BRFSS, MCH 5-year Needs Assessment, other) on barriers to accessing oral health care.

1.2.2 Educate policy decision makers using GIS mapping and other resources.

1.2.3 Incentivize providers to establish practices in dental shortage areas across the state (loan repayment programs, legislative funding for rural scholarships, etc.).

1.2.4 Increase the establishment and utilization of Board of Dental Examiners of Alabama approved workforce and delivery models in rural dental shortage areas.

1.2.5 Develop and distribute resources to publicize and promote oral health professions in Jr. High – High School, colleges, and universities statewide.

Objective 1.3 **Increase the proportion of infants, children, adults, and older adults who received comprehensive dental services during the past year.**

1.3.1 Create a communication plan to educate parents and caregivers on the importance of a dental home for infants, children, and young adults.

1.3.2 Use public service announcements and other innovative outreach methods such as social media to educate the public on the benefits of dental care beginning at age one and continuing to the end of life.

1.3.3 Use public service announcements and other innovative outreach methods to educate Alabama Medicaid and ALL Kids recipients on the benefits of utilizing these dental programs.

Objective 1.4 Increase the proportion of persons with disabilities who received comprehensive dental services during the past year.

1.4.1 Support the inclusion of dental benefits for Medicaid eligible special needs adults.

1.4.2 Create and maintain a list of dental providers who understand the complex treatment needs and are comfortable providing care for persons with disabilities.

1.4.3 Increase the number of organizations that represent individuals with disabilities (e.g., mental health, developmental disabilities) on the Oral Health Coalition of Alabama.

1.4.4 Expand continuing education opportunities that provide training for all dental professionals on the complex treatment needs of persons with disabilities.

Objective 1.5 Increase the proportion of pregnant women who received comprehensive oral health care during pregnancy.

1.5.1 Promote oral health awareness and dental visits during pregnancy through the Alabama Perinatal and WIC Programs.

1.5.2 Promote oral health awareness and the importance of dental visits during pregnancy through County Health Departments and other non-profit programs that provide Maternity Care Coordination for at-risk pregnant women.

1.5.3. Use marketing campaigns (billboards, free magazines, floor clings, etc.) to promote dental visits during pregnancy and increase awareness in underserved areas.

1.5.4 Educate obstetricians and providers of prenatal services on the importance of good maternal oral health.

1.5.5 Promote and increase access of oral health services by dental providers.

1.5.5.a Increase the number of dental providers providing care to pregnant women.

1.5.5.b Provide continuing education programs to educate dental providers on the importance and safety of dental visits during pregnancy.

Patient Populations with Dental Needs

State of Alabama

The Southeastern United States is the nation's poorest region, with Alabama ranking 44th in childhood wellbeing (Annie Casey Kids Count Data Book. 2015). Alabama is a medium-sized state of 50,744 square miles with a population of just over 4.75 million people. In 2010, 59% of Alabama's population resided in urban areas and 41% in rural areas (Census Bureau Data, 2010). Alabama has very limited economic resources and is 44th in the country in annual personal per capita income-$37,512 annually-compared to the national average of $46,049 (US Department of Commerce, Bureau of Economic Analysis, 2014). Approximately 27% of Alabama's children live in poverty, ranking 39th in the country in economic well-being (National Center for Children in Poverty, 2013; Annie Casey Kids Count Data Book, 2015). Socio-cultural determinants of health predict that populations that are largely of low socioeconomic status, rural, ethnic minority in make-up and/or composed of individuals with special health needs will experience a disproportionately high degree of disease. The need for dental care in Alabama children five years old or less is significant.

Table 1: Decay Experience in AL Children

	Decay Experience	Untreated Decay	Urgent need
US (2-5 year olds)	22.7%	10.0%	
ALABAMA (K-5 kids)	43.1%	19.7%	5.1%
2 Target Grant Counties	48.0%	25.0%	
AL (K-5 kids) Free/Reduced Lunch			
<25% on FRL	24.2%	10.3%	0.6%
>75% on FRL	50.7%	23.5%	7.3%

Tooth decay in Alabama is twice that of the national rate. Dental health disparities are large and significant for lower socioeconomic children and mirror the number of children on Medicaid.

Table 2: Alabama Medicaid Children Receiving Dental Care FY 2014

Age	Percent with Any Dental Treatment	Average Cost Per Child
0	12.1%	$5
1	37.2%	$75
2	53.7%	$150
3	66.7%	$235
4	69.5%	$285
5	70.3%	$300

Statewide for FY 2014, 41.3% of children aged 3-4 received a dental prophylaxis, while only 15.9% of these young children had any restorative care.

Practicing Dentist Trends in Alabama: Comparing Data from 2003-2017

The University of Alabama at Birmingham, School of Dentistry was founded in 1948 and has been graduating approximately 55 dentists each year. Current enrollment has increased to 63 per entering class. Many graduates return to their hometowns, others stay in the Birmingham area and others choose to practice out of state after graduation. At present, Alabama's dentists principally populate our 13 urban counties. These counties account for 58% of the state's population and 79% (1,673) of the state's dentists. Our most rural 41 counties, however, constitute 21% of the population but only 9.8% (208) of the state's dentists. Among our smallest populated 25 counties, there are only 3.4% (69) of our state's dentists, while 8.3% of the state's population resides there.

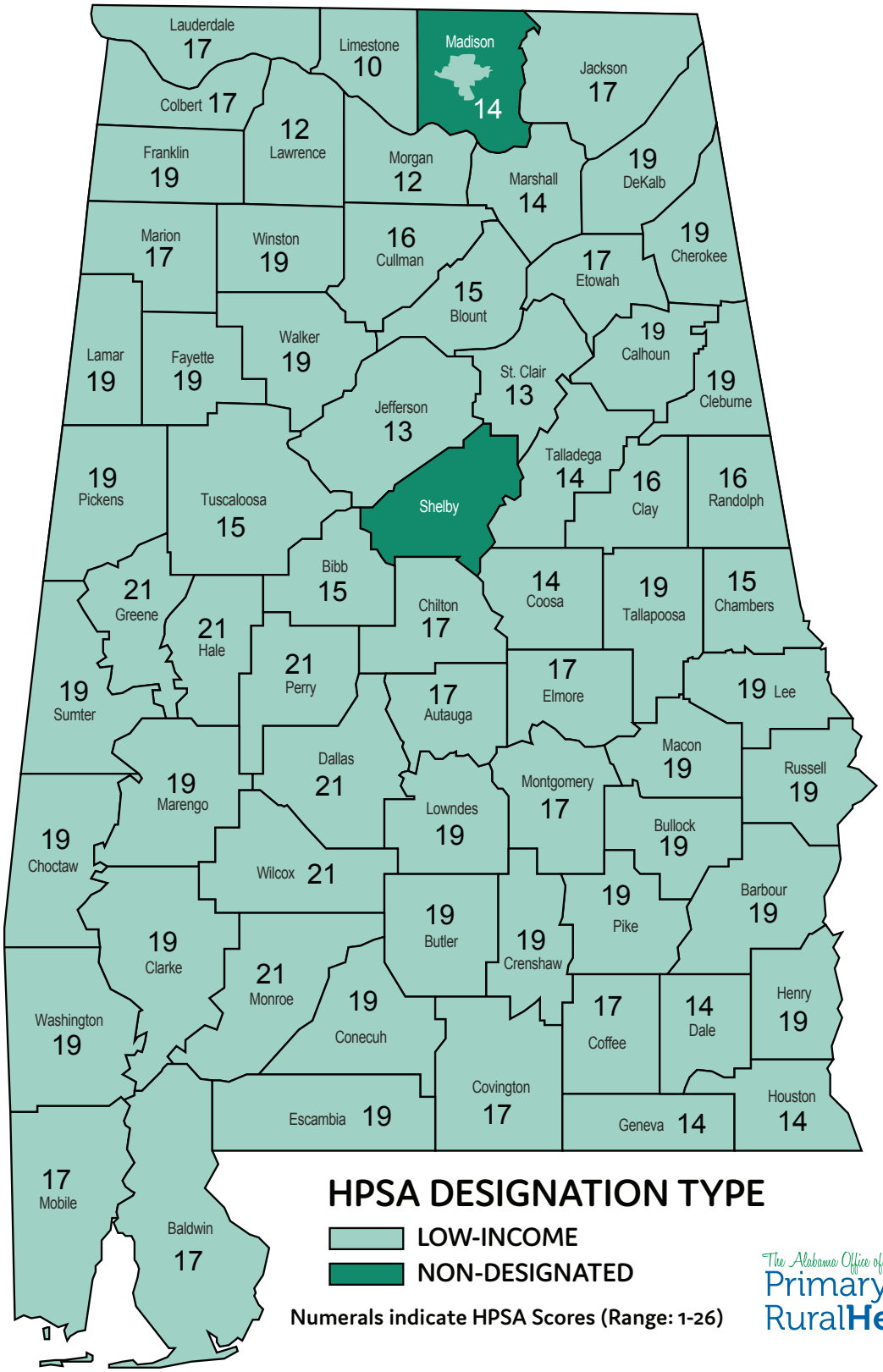
County	Population 2003	Population 2017	GP & Pedo 2003	GP & Pedo 2017	Difference 2003-2017
Lauderdale	90,167	92,318	43	36	-7
Marshall	85,848	95,157	30	24	-6
Tuscaloosa	168,107	206,102	65	60	-5
Mobile	405,171	414,836	138	133	-5
DeKalb	67,695	70,900	19	15	-4
Calhoun	112,122	114,611	38	34	-4
Bibb	22,009	22,643	5	2	-3
Cherokee	25,291	25,725	5	2	-3
Coffee	44,507	51,226	18	15	-3
Escambia	39,093	37,728	10	8	-2
Coosa	12,500	10,581	1	0	-1
Pickens	21,033	20,324	2	1	-1
Wilcox	13,085	10,986	2	1	-1
Crenshaw	13,669	13,913	3	2	-1
Fayette	18,603	16,546	3	2	-1
Lawrence	35,624	33,244	3	2	-1
Sumter	14,462	13,040	3	2	-1
Geneva	26,298	26,614	4	3	-1
Macon	23,869	18,963	4	3	-1
Randolph	23,119	22,652	4	3	-1
Marengo	22,307	19,673	5	4	-1
Choctaw	15,890	12,993	6	5	-1
Marion	31,569	29,998	7	6	-1
Franklin	32,226	31,628	8	7	-1
Tallapoosa	81,990	40,727	10	9	-1
Dallas	45,907	40,008	12	11	-1
Talladega	81,990	80,103	14	13	-1
Greene	9,876	8,422	0	0	0
Lowndes	13,661	10,358	0	0	0
Clay	14,564	13,492	2	2	0
Conecuh	14,092	12,395	2	2	0
Washington	18,429	16,756	2	2	0
Lamar	15,975	13,918	3	3	0
Butler	21,190	21,190	5	5	0

County	Population 2003	Population 2017	GP & Pedo 2003	GP & Pedo 2017	Difference 2003-2017
Henry	16,526	16,526	5	5	0
Monroe	24,345	24,345	5	5	0
Barbour	29,905	29,905	7	7	0
Chambers	36,467	36,467	8	8	0
Covington	37,817	37,817	9	9	0
Dale	49,543	49,543	15	15	0
Perry	11,655	9,574	1	2	1
Bullock	11,840	10,362	2	3	1
Winston	25,680	23,805	5	6	1
Blount	54,805	57,704	6	7	1
Clarke	28,035	24,392	7	8	1
Chilton	41,911	43,941	9	10	1
Walker	71,455	64,967	25	26	1
Houston	90,527	104,056	37	38	1
Cleburne	14,509	14,924	0	2	2
Hale	17,699	14,952	1	3	2
Pike	30,270	33,286	6	8	2
Elmore	70,688	81,799	11	13	2
Jackson	55,557	52,138	13	15	2
St. Clair	69,295	88,019	14	16	2
Colbert	55,735	54,216	15	17	2
Jefferson	69,295	659,521	408	411	3
Autauga	46,625	55,416	12	16	4
Montgomery	227,533	226,349	93	99	6
Cullman	80,397	82,471	20	27	7
Russell	50,463	58,172	7	15	8
Morgan	113,994	119,012	37	47	10
Limestone	69,013	92,753	15	26	11
Lee	122,883	158,991	30	41	11
Etowah	104,239	102,564	31	43	12
Madison	286,949	356,967	136	167	31
Baldwin	153,555	208,563	52	107	55
Shelby	157,534	210,662	39	101	62
	4,564,479	**4,863,340**	**1,557**	**1,740**	**183**

Dental Health Professional Shortage Areas

October 2017

Niko Phillips (334) 206-3807 or Niko.Phillips@adph.state.al.us



The Alabama Office of PrimaryCare & RuralHealth

GOAL 1: *Increase Access to Oral Health Care*

Gaps in Alabama Dental Workforce

In 2016, 65.5 of 67 counties in Alabama were classified as dental HPSAs. The state has 30% fewer dentists than the national rate and ranks 48th in the nation in dentist to population ratio. Slightly more than 2 million of the state's 4.8 million persons live in 45 rural counties, but these counties have fewer dentists.

Dentists to Population Ratios

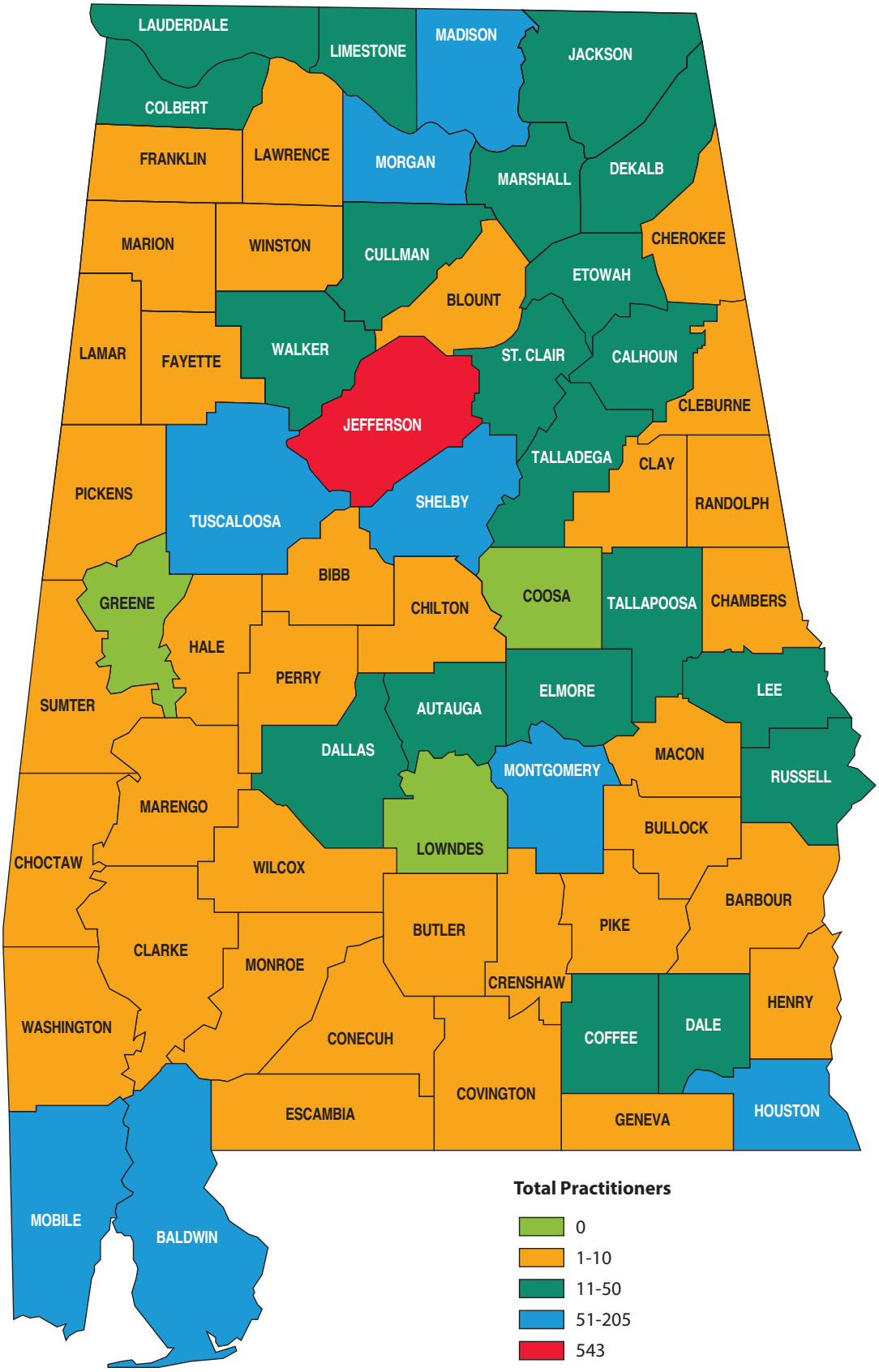
Nationally	1 dentist per 1,700 people
Alabama	1 dentist per 3,000 people
Urban Counties	1 dentist per 2,500 people
Rural Counties	1 dentist per 4,400 people

Access to preventative and restorative dental services in Alabama is limited among the state's lowest income population. The paucity of safety net dental clinics providing dental care to the under served is striking. Only 17 of the state's 67 counties have community dental clinics (including FQHCs). There are only two school-based dental clinics and one dental school.

Pediatric dental care is heavily dependent on the general dentist in Alabama. Over the last five years, pediatric dentists only provided 20% of the treatment received by Alabama Medicaid children aged 0-5 years of age. The geographic distribution of pediatric dentists contributes significantly to this finding. Only 19 of 67 Alabama counties have a pediatric dentist. Forty percent of pediatric dentists are located in Jefferson County (Birmingham) and 69% are located in the four largest counties. Forty-eight of 67 counties in Alabama are without a pediatric dentist, resulting in general dentists providing most of the dental care to children in Alabama.

The number and distribution of pediatric specialists are insufficient to meet the dental needs of young children in Alabama. As with other urban dental schools, UAB's pediatric clinic does not have the patient flow to allow students to develop clinical competence for children 5 years of age or younger. This grant will allow us to partner with TCHD, CMC and SDC to develop pediatric dental services for these communities while providing a patient base to train the general workforce that will practice across the state. And, since 65.5 of 67 AL counties are designated HPSA shortage areas, general dental graduates will likely be serving in a designated shortage area.

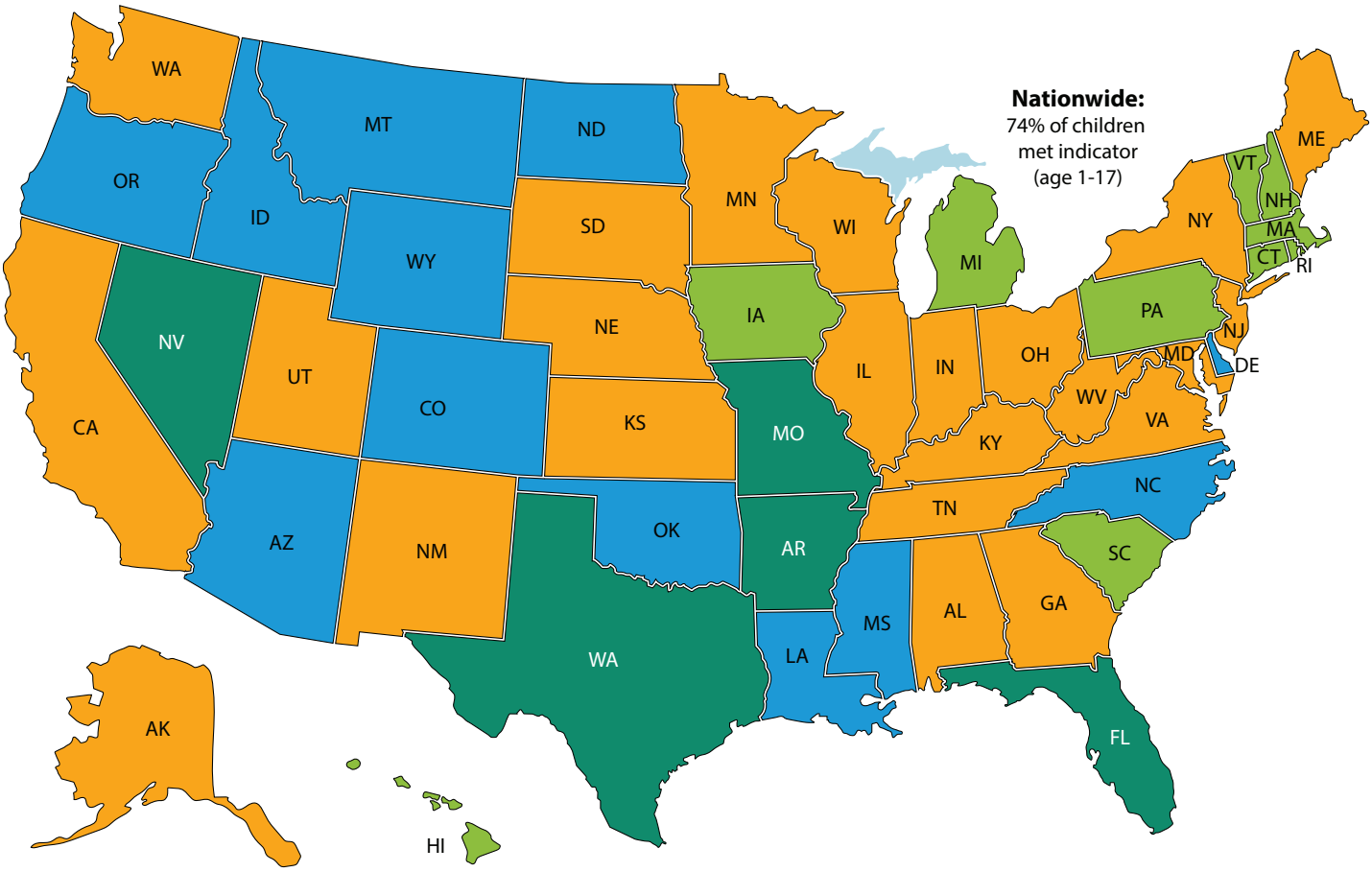
Alabama Oral Health Care Providers



Preventive Dental Care

Percent of children with preventive dental visit in the past year (age 1-17)

2007 National Survey of Children's Health



State Ranking

Higher=Better Performance

- Significantly higher than U.S
- Higher than U.S but not significant
- Lower than U.S but not significant
- Significantly Lower than U.S

Data Resource Center for Child and Adolescent Health
A project of:CAHMI-Child and Adolescent Health Measurement Initiative, 2007

Alabama's Smile Contest

To promote preventive dental visits for children ages 1 through 17 years, the Oral Health Office of the Alabama Department of Public Health designed and implemented the first annual statewide "Share Your Smile With Alabama" smile contest in 2017. Applications were accepted from third grade students statewide and the winners announced in April 2018, coinciding with National Children's Dental Health Month, at a live news conference at the RSA Tower in Montgomery. The winners were also featured on billboards, newspapers, and magazine ads with over half a million impressions statewide. The contest garnered recognition by Family Voices, a national, family-led organization that works to keep families at the center of children's health care. Family Voices now spotlights this strategy by promotion of the contest to other state Title V programs, promoting Bright Futures guidelines and encouraging other state Title V programs that have identified NPM 13.2 to consider implementing a smile campaign based on the Alabama model. Other state Title V programs can easily modify this strategy for their state. For example, if a state is focusing on NPM 13.1 - Preventive dental visits during pregnancy, Title V could launch a smile campaign for expectant women. Moreover, for Title V programs that identify a state priority need to promote physical activity for children (NPM 8.1 and 8.2), they could sponsor a smile campaign for children smiling while wearing helmets to promote the importance of wearing a helmet while biking, or smiling with mouth guards to promote the importance of protecting teeth while playing sports.

MATERNAL AND CHILD HEALTH SERVICES TITLE V BLOCK GRANT

ESM – NPM #13:1

Increase the proportion of infants and children, ages 1 through 17 years, who report receiving a preventive dental visit in the past 12 months by piloting the Home by One program

Proclamation

By the Governor of Alabama

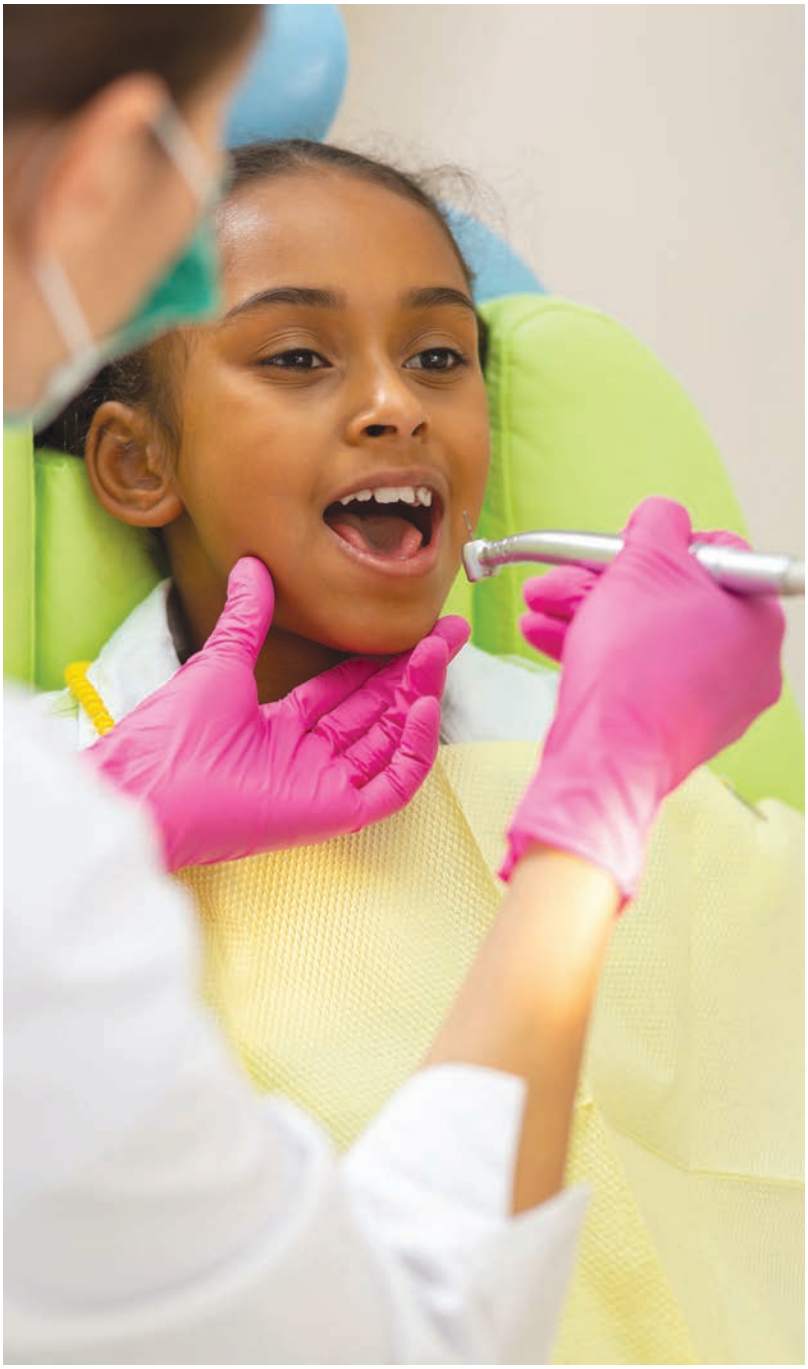
Children's Dental Health Month

Pictured Left to Right: Jennifer Morris, ADH, Oral Health Coordinator; ADPHs Grace Thomas, M.D., FAAOO, Medical Director, Family Health Services; ADPHs Zack Studstill, DMD, Executive Director; ALLIA Scott Harris, M.D., MPH, State Health Officer; ADPH Chris Lang, M.P.H., Deputy Director, Family Health Services; ADPH Tommy Ingram, DMD, Director, Oral Health Office; ADPH Cathy Caldwell, M.P.H., Director, C.HP; ADPH Tasha Cooper, MN, Executive Director, HomeStart; Tower Region: Bradley Richards, JD, MS, MPA, Executive Director; Alabama Board of Nursing: Frances Stuart Lackwood, DMD, VDPH, State Committee of Public Health; Seated: Governor Kay Ivey

Preventive Dental Care

Percent of children with preventive dental visit in the past year (age 1-17)

2007 National Survey of Children's Health



HIGHER than US; Statistically Significant	US PREVELENCE	78.4%
	Hawaii	86.9%
	Rhode Island	86.5%
	Vermont	86.1%
	Connecticut	84.9%
	Iowa	84.8%
	New Hampshire	84.2%
	Massachusetts	83.8%
	Michigan	83.0%
	Pennsylvania	82.7%
	South Carolina	82.0%
	District of Columbia	81.7%
HIGHER than US; Not Significant	Washington	81.3%
	Maine	80.9%
	New York	80.8%
	South Dakota	80.7%
	Alaska	80.5%
	Illinois	80.5%
	West Virginia	80.3%
	Georgia	80.3%
	Wisconsin	80.2%
	Minnesota	79.5%
	Nebraska	79.5%
	Indiana	79.4%
	New Mexico	79.3%
	Utah	79.1%
	Maryland	79.1%
	Virginia	79.0%
	Tennessee	78.8%
	Kansas	78.7%
	New Jersey	78.7%
	Ohio	78.7%
	Kentucky	78.4%
	Alabama	78.4%
	California	78.4%
LOWER than US; Not Significant	North Carolina	78.3%
	Oklahoma	78.2%
	Wyoming	78.0%
	North Dakota	77.2%
	Colorado	77.0%
	Delaware	76.8%
	Idaho	76.6%
	Louisiana	76.5%
	Montana	76.5%
	Oregon	75.7%
	Mississippi	75.5%
	Arizona	75.5%
LOWER than US; Stat. Significant	Missouri	75.4%
	Arkansas	74.7%
	Texas	74.0%
	Nevada	73.1%
	Florida	68.5%

NOTES:

Higher %'s = Better Performance

Statistical Significance: $p<.05$

GOAL 2:
Professional Education and Integration

GOAL 2: *Professional Education and Integration*

By September 30, 2023, enhance professional integration between oral health providers, medical providers and social services providers across the lifespan.

Professional Integration is the management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs, over time and across different levels of the health system.

Objective 2.1: Increase the number of medical providers and social services providers who promote oral health initiatives (education, prevention, dental visits) through their practices.

2.1.1 Support efforts to maintain the highest quality of dental professional education in Alabama.

2.1.1.a Assure adequate funding for dental schools.

2.2.2.b Educate policy makers on the cost of dental education and on state funding issues.

2.1.2 Expand the partnership between the Academy of Pediatric Dentistry (AAPD) and the Academy of Pediatricians (AAP) (e.g., 1st Look, Brush/Book/Bed, other).

2.1.3 Promote oral health through charity organizations or programs for at-risk populations (e.g., Gift of Life, Pay-It-Forward, etc).

2.1.4 Increase oral health activity through Federally Qualified Health Centers (FQHCs), Community Health Centers (CHCs), and other facilities or programs with or without dental clinics onsite.

Objective 2.2: Increase the number of educational opportunities that allow oral health and other health care providers to work as a single team to address patient health care needs.

2.2.1 Create, maintain, and distribute a list of higher education interprofessional training opportunities.

2.2.2 Increase the number of dental residency programs that offer interprofessional experiences for their residents.

2.2.3 Promote the free online continuing medical education activities that teach practical oral health knowledge and skills available at smilesforlifeoralhealth.org.

Objective 2.3: Increase the number of programs that educate oral health providers on the social determinants of oral health among underserved populations.

2.3.1 Ensure that continuing education opportunities include information on the impact of social determinants on oral health.

2.3.2 Ensure dental school curricula and continuing education courses identify and address the medical/oral health needs of underserved populations (older adults, pregnant women, Hispanics, Native Americans, others).

PRAMS

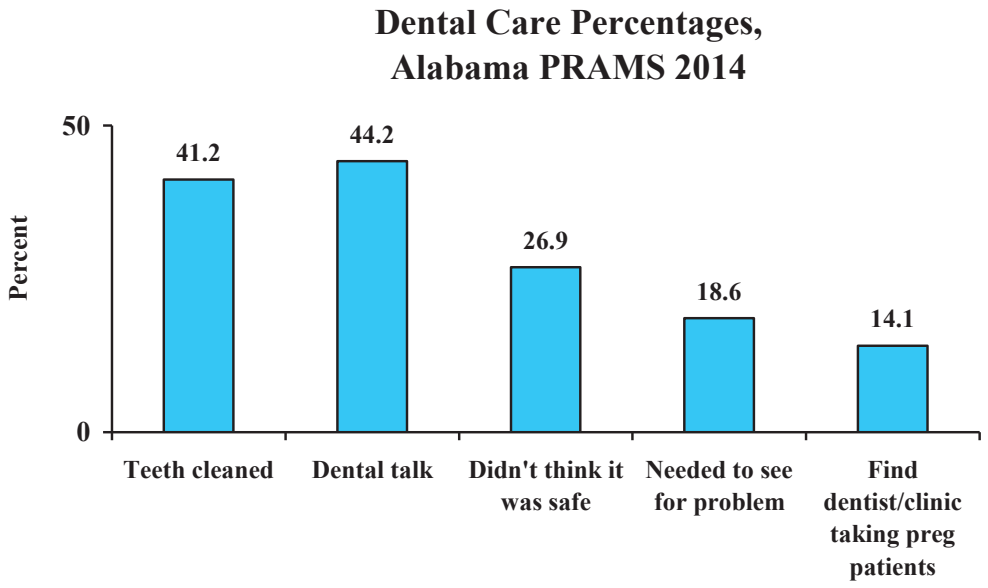
Moms Helping Moms Have Healthy Babies - Your Voice Does Matter!

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a joint research project between state departments of public health and the Centers for Disease Control and Prevention (CDC). On a personal level, moms can positively influence the success rate for future healthy pregnancies and deliveries by sharing their experiences with the PRAMS program.

Alabama is one of the **47 states currently participating in PRAMS**. Additional participants include New York City, the District of Columbia, Puerto Rico and the Great Plains Tribal Chairmen's Health Board. Participating states represent 83% of all of U.S. live births. Two other states (California and Ohio) previously participated.

What is the purpose of PRAMS?

The purpose of Pregnancy Risk Assessment Monitoring System (PRAMS) is to find out why some babies are born healthy and others are not. New mothers are surveyed about their pregnancy, delivery, and their new baby. That information helps us build on positive factors while overcoming adverse conditions. The information collected is used in developing health care programs and policies and it helps doctors and nurses improve health care while making better use of health resources. Survey responses are grouped with those of other women and may be combined with information the health department has from other sources or studies.

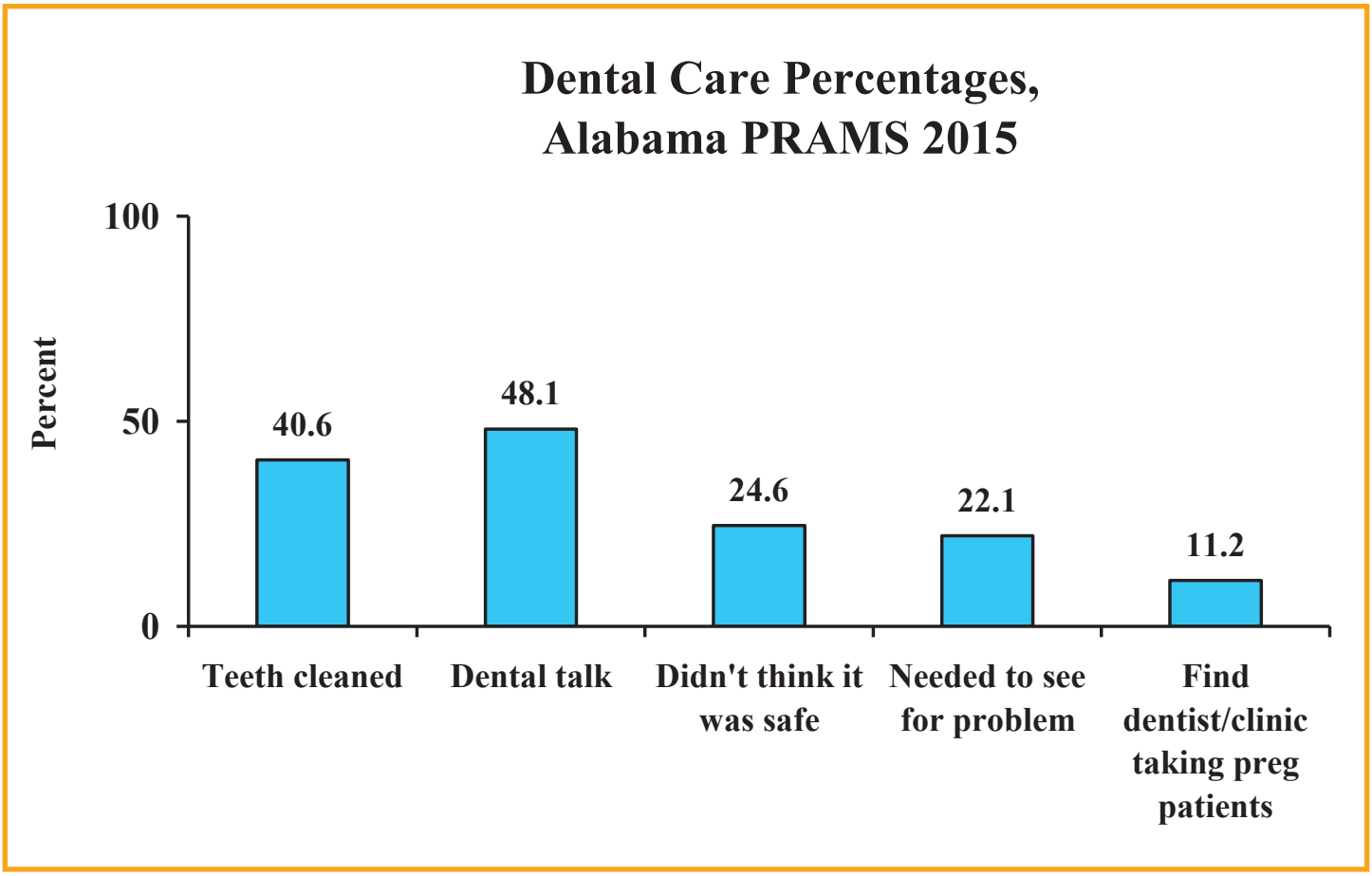


(Question 29 & 82 of the PRAMS Survey)

Periodontal disease is a serious dental infection caused by bacteria. This disease can destroy bone and other structures that support the teeth. Pregnant women who have periodontal disease are at increased risk of having a premature or preterm delivery. Non-surgical dental procedures are available to safely treat this condition in pregnant women.

In 2014, 41.2 percent of Alabama mothers got their cleaned during pregnancy, and 26.9 percent reported they didn't think teeth cleaning was safe. If following the recommended guidelines for good dental health, all mothers should visit the dentist at least once during their pregnancy for a checkup and cleaning.

95% Confidence Intervals					
About Teeth Cleaning	Teeth Cleaned	Dental Talk	Didn't Think it Was Safe	Needed to see for problem	Find Dentist/Clinic Taking Pregnant Patients
Percent	38.1-44.4	40.9-47.6	21.3-33.3	16.0-21.4	10.0-19.5



(Question 29 & 82 of the PRAMS Survey)

Periodontal disease is a serious dental infection caused by bacteria. This disease can destroy bone and other structures that support the teeth. Pregnant women who have periodontal disease are at increased risk of having a premature or preterm delivery. Non-surgical dental procedures are available to safely treat this condition in pregnant women.

In 2015, 40.6 percent of Alabama mothers got their teeth cleaned during pregnancy, and 24.6 percent reported they didn't think teeth cleaning was safe. If following the recommended guidelines for good dental health, all mothers should visit the dentist at least once during their pregnancy for a checkup and cleaning.

95% Confidence Intervals					
About Teeth Cleaning	Teeth Cleaned	Dental Talk	Didn't Think it Was Safe	Needed to see for problem	Find Dentist/Clinic Taking Pregnant Patients
Percent	37.5-43.7	44.7-51.4	19.3-30.8	19.4-25.1	7.6-16.2

Preventive Dental Visits for Expectant Mothers vs Pre-Term and Low Birthweight Infants

For years, controversy over the safety of preventive dental visits for pregnant mothers has been pervasive. It is now widely accepted that preventive visits are not only safe--but encouraged, citing the link between periodontal disease and preterm, low birth weight infants. A definitive link has also been established between preterm and low birth weight infants and infant mortality.

The Alabama Department of Public Health announced that the state infant mortality rate fell to the lowest level in history in 2017. Even so, the state's low birthweight rate still ranks third nationally.

The 2017 rate of 7.4 deaths per 1,000 live births is an improvement over the 2016 rate of 9.1. A total of 435 infants born in Alabama died before reaching 1 year of age in 2017; 537 infants died in 2016.

While state health officials say there is still a big difference between birth outcomes for black and white infants, the infant mortality rate for black infants declined to an all-time low in 2017, and the infant mortality rate for white infants was the second lowest. The rate of 11.2 for black infants was an improvement over the 15.1 rate in 2016, and the rate of 5.5 for white infants was a drop over the 6.5 rate for whites in 2016.

State health officials say there have been many positive developments. Teen births and smoking during pregnancy are continuing to decline. The percentage of births to teens (7.3) and the percentage of births to mothers who smoked (9.6) are the lowest ever recorded in Alabama, with the largest decrease among teen mothers. There was also a decline in the number of infants born weighing less than 1,000 grams and infant deaths to those small infants.

While there was a significant decline in infant mortality, the percent of low weight births and births at less than 37 weeks gestation remained the same, according to the new statistics. Between the years 2015 through 2017, the combined rate of 8.3 was tied with the years 2009 through 2011 as the two lowest three-year rates of infant mortality in Alabama.

The top three leading causes of infant deaths in 2017 that accounted for 43.4 percent of infant deaths were as follows:

- Congenital malformations, deformations and chromosomal abnormalities
- Disorders related to short gestation and low birth weight
- Sudden infant death syndrome

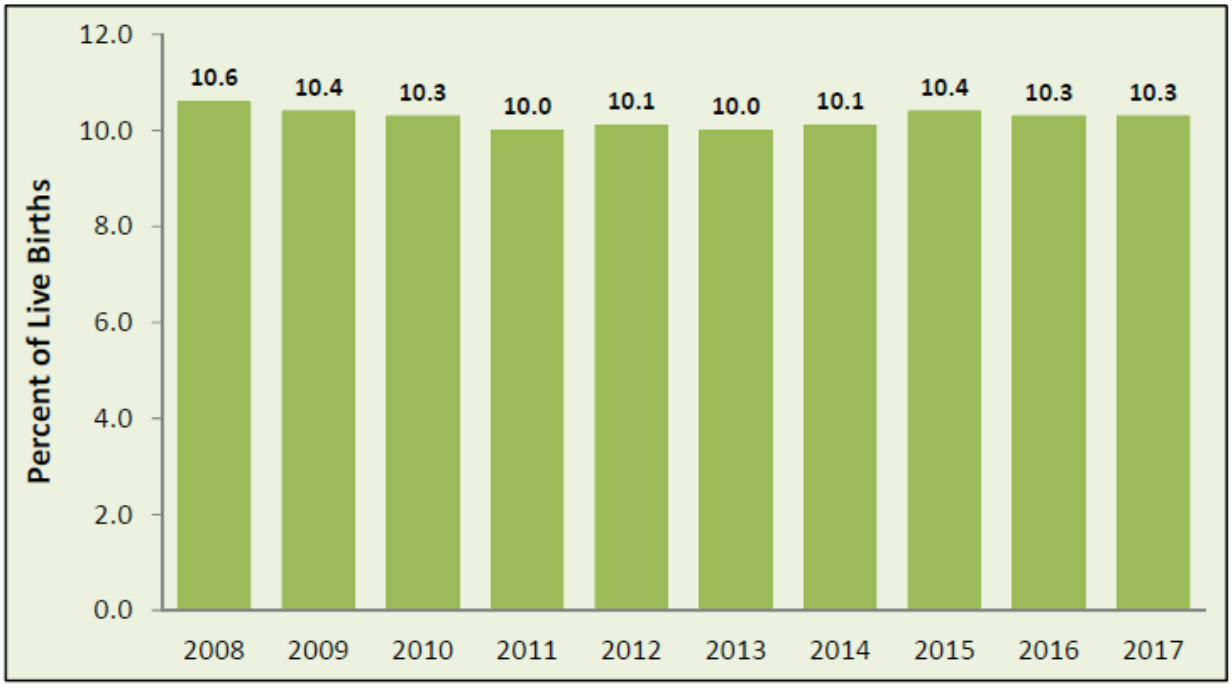
These top causes of infant deaths parallel those for the U.S. as a whole in 2016.

MATERNAL AND CHILD HEALTH SERVICES TITLE V BLOCK GRANT

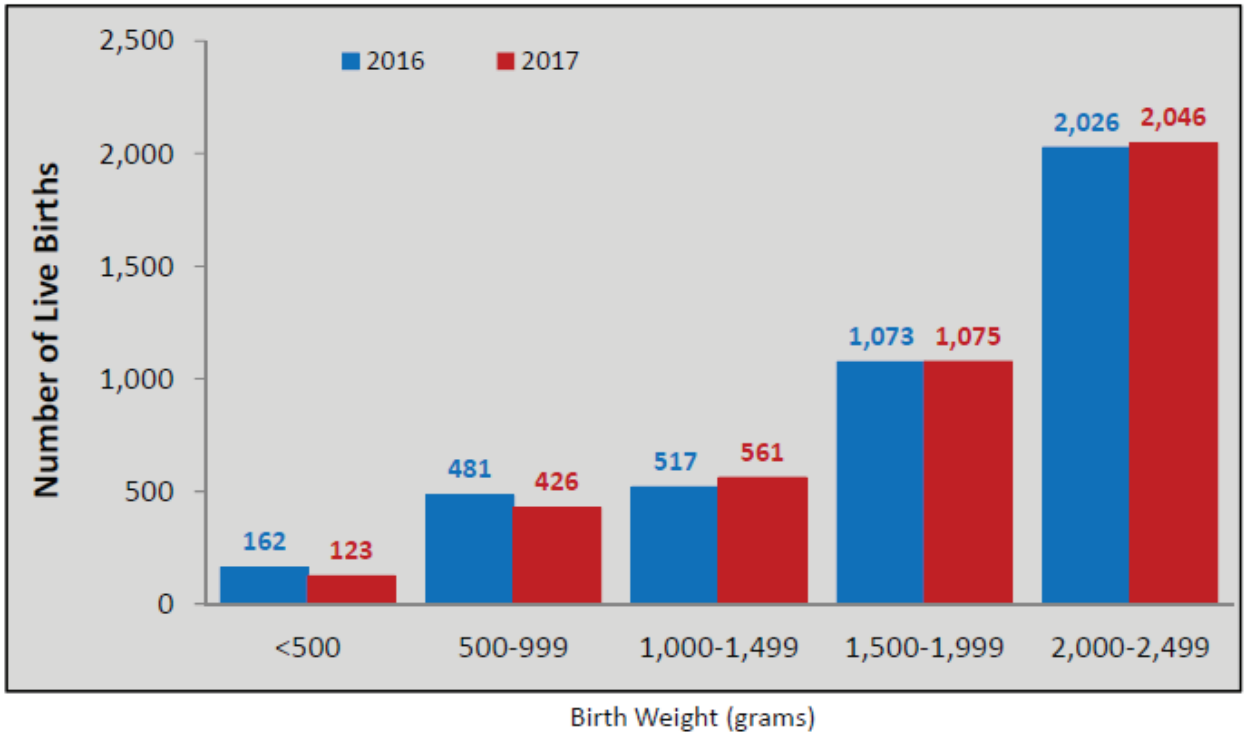
ESM – NPM #13:2

Increase the proportion of at-risk pregnant women who report receiving a preventive dental visit during pregnancy by piloting the First Steps Program

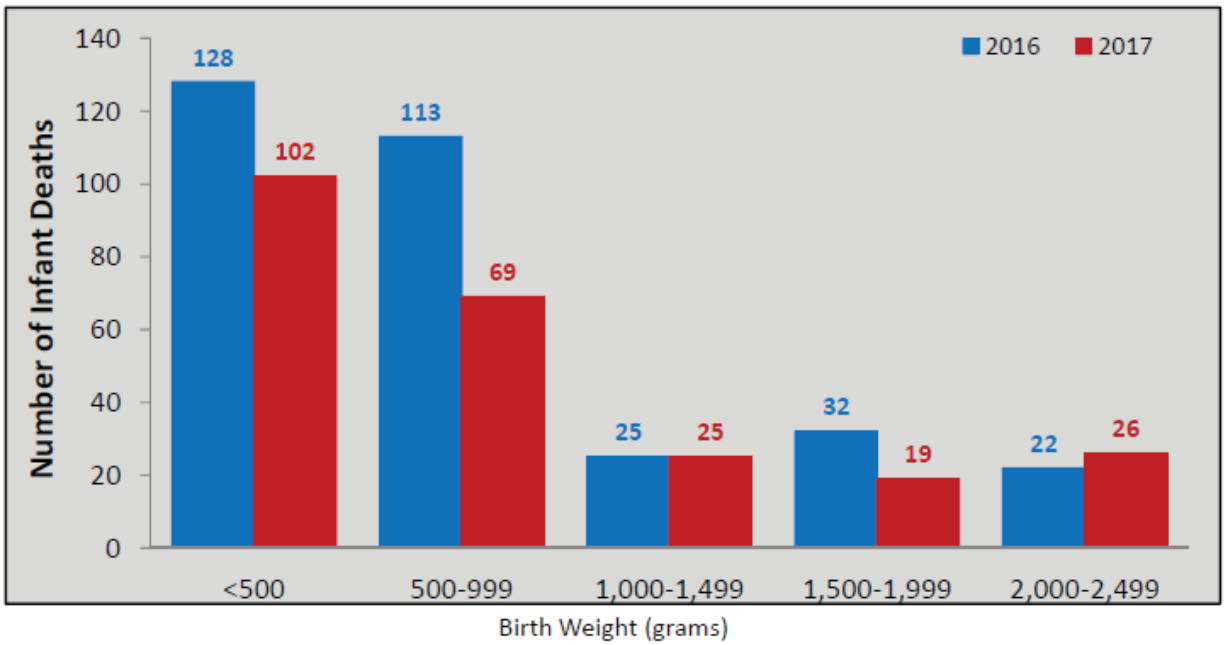
PERCENT OF LOW WEIGHT BIRTHS ALABAMA, 2008-2017



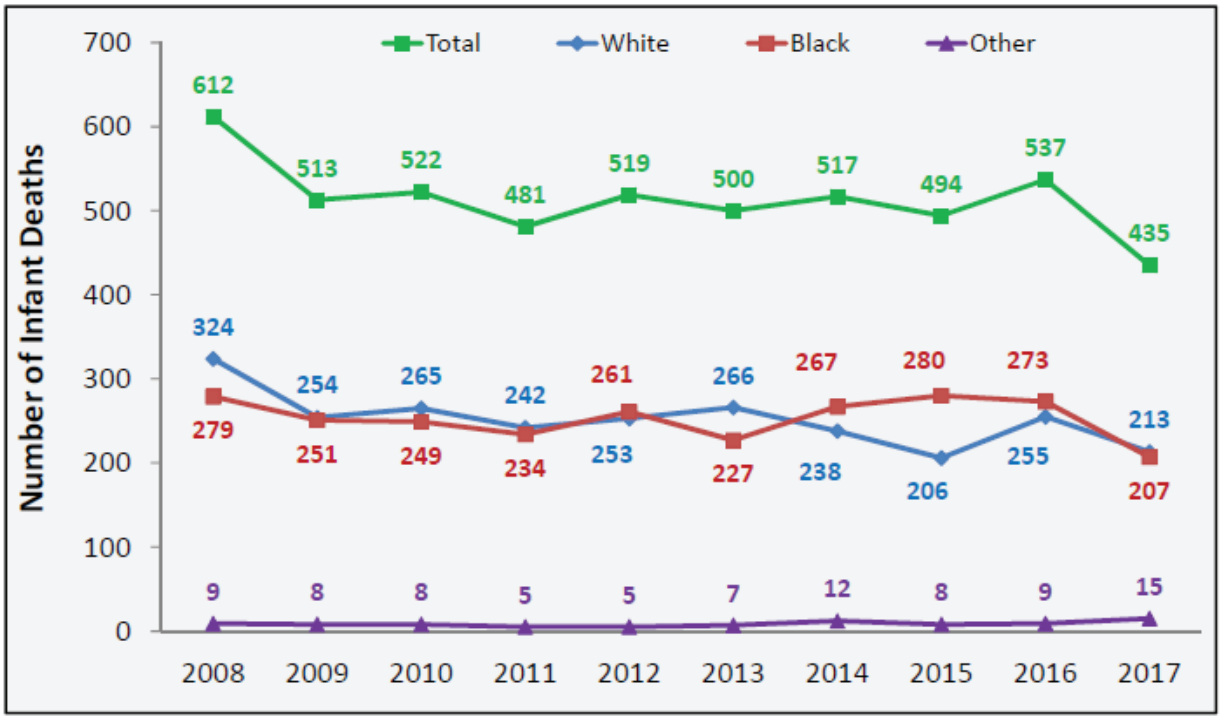
NUMBER OF PRETERM BIRTHS BY BIRTH WEIGHT ALABAMA, 2016 vs. 2017



NUMBER OF INFANT DEATHS WITH PRETERM BIRTHS BY BIRTH WEIGHT ALABAMA, 2016 vs. 2017



NUMBER OF INFANT DEATHS ALABAMA, 2008-2017



Are teeth cleanings safe while I'm pregnant?

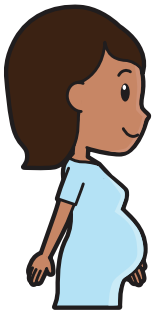
Gum disease increases the likelihood of **pre-term birth** and **infant mortality.** Have your teeth cleaned even **during** pregnancy.

ALABAMA PUBLIC HEALTH

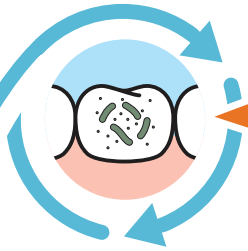
For more information, visit
alabamapublichealth.gov/oralhealth

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

Now you're brushing for two



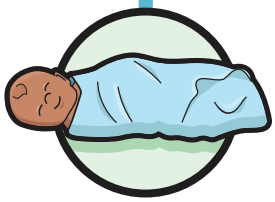
WHEN YOU'RE PREGNANT
YOU MAY BE MORE PRONE TO
GUM DISEASE AND CAVITIES



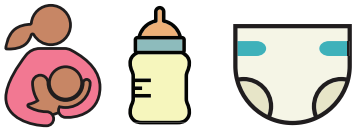
After your baby is born, you could pass the bacteria that contributes to cavities from your mouth to hers.

THAT'S WHY
EVERY PREGNANT WOMAN
NEEDS TO VISIT HER DENTIST

MAKE YOUR APPOINTMENT
BEFORE THE BABY COMES

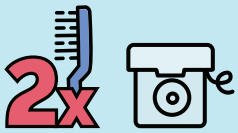


ONCE SHE COMES,
WE'RE GUESSING YOU'LL
BE PRETTY BUSY



Tips to keep your mouth healthy

IF YOU HAVE
MORNING SICKNESS,
RINSE YOUR MOUTH WITH ONE TSP OF BAKING SODA IN A GLASS OF WATER
AFTER YOU GET SICK.



BE SURE TO
BRUSH TWICE A DAY AND FLOSS DAILY

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ALABAMA PUBLIC HEALTH

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

How to Structure Your Child's Nighttime Routine

KIDS LOVE ROUTINES – BRUSH, BOOK, BED!

Brush, Book, Bed is a program of the American Academy of Pediatrics to help parents develop healthy nighttime routines. Start your routine every night at the same time, 30 minutes before bedtime so that you have enough time to brush teeth, read together, and go to sleep. For tips on what should be included in this routine visit www.HealthyChildren.org/BrushBookBed.

Brush, Book, Bed™
A program of the American Academy of Pediatrics

Brush

Each night help your children to brush their teeth.

- **From birth:** Use a soft washcloth to wipe your baby's gums after feedings and don't put babies in bed with a bottle of milk or juice. Avoid sharing items with your baby that have been in your own mouth. Once moving on to solids, choose foods that are less likely to cause cavities and limit sugary and sticky foods.
- **Under 3:** As soon as you can see any teeth, you can start to brush! Brush two times a day with a smear (grain of rice) of fluoride toothpaste.
- **3 – 6:** Brush two times a day with a pea-sized amount of fluoride toothpaste. It's okay to let your child practice brushing, but they need your help to do the best job! Put the right amount of toothpaste on the brush for them and brush their teeth, being sure you reach all sides and their tongue. It's also okay to let them practice on their own first! Once teeth touch, they should also be flossed.
- **Always:** Limit sugary foods and drinks to only at mealtimes. Limit juice to only 1 glass a day and only 100% juice (for children over age 1). Between meals, encourage them to drink only water. Fluoridated water is best. **Start going to the dentist by age 1, and go two times a year going forward.**

Book

After you have brushed you children's teeth, it's time to read!

- Children **love to hear your voice** – sing, talk, and read aloud as much as possible.
- **Name and point to things** in pictures of books. As they get older (12-18 months), ask them questions as you read a book. *"Where's the puppy?" or "What color is the ball?"*
- **Act out the story** or pictures with your face, hands, and voice.
- **Babies love sturdy books with pictures and rhymes.** It's okay if they chew the book! It is how babies explore the world around them.
- Let **your child pick out a book** (or two!) to read. This encourages healthy independence.
- **Read stories everyday** but let your child decide how long you read.

Bed

After brushing teeth and reading together, it is time to go to bed.

- **Make daytime playtime**. Talking and playing with your children during the day will help them sleep for longer periods during the night.
- Put your children to bed when drowsy, but awake. This teaches them to **fall asleep on their own** from being awake.
- Babies should **sleep on their backs** without pillows, blankets, or stuffed animals in the crib. Babies should not share a sleep surface with a parent. The safest place for them is in a crib in a parent's room.
- When your baby fusses during the night, **wait a few minutes**. See if she can fall asleep on her own, if not, check on her.
- **Keep your baby calm and quiet** during nighttime feedings or changings.
- When your older child awakes in the night, first place a stuffed animal or blanket in his bed to help him to learn how to console himself. Before age one, stuffed animals and blankets should not be placed in the bed with the baby.

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

GOAL 2: *Professional Education and Integration*

The **Brush, Book, Bed Statewide Initiative** engaged 12 practices that serve a large percentage of low-income children and their families and who already participated in the AL-AAP's Reach Out and Read-Alabama. Many had been trained and certified in the 1st Look Alabama Medicaid and CHIP program (oral health risk assessment, fluoride varnish, and referral to a dental home). For this project, the target population was patients seen for nine- and twelve- month well-child visits.

GOALS

- Raise awareness of the importance of nighttime routines that include brushing teeth, reading together daily, and regular bed times.
- Increase the number of pediatricians and ancillary personnel trained to communicate with parents about early childhood literacy and oral health practices.
- Increase the number of pediatricians and ancillary personnel who are performing oral health risk assessment and applying fluoride varnish.
- Increase the number of books in homes of families of children ages 0 to 3 and the proportion of parents reading aloud every day to their children in Alabama.

12 Practice sites from across state

60 Pediatricians **10** CRNPs & RNs

20,445 children ages 0 to 3 years of age in practice panels

51% Medicaid-eligible

Project Measures

- Documenting an oral health risk assessment between 12 and 36 months
- Applying fluoride varnish to a high-risk patient between 12 and 36 months of age
- Providing anticipatory guidance to families of patients between 12 and 36 months of age
- Referring to a dental home
- Distributing the BBB Book, toddler toothbrush and toothpaste

"A child with a family with several kids who had to have multiple teeth pulled at a young age received dental counseling, had varnish applied and six months later is still cavity-free and is making better choices for their teeth."

"We were able to reach so many children and encourage a consistent bedtime routine with a focus on dental importance and family reading time with children to support childhood literacy."

COLLABORATIVE PARTNERS

Reach Out & Read — where great stories begin

American Academy of Pediatrics — DEDICATED TO THE HEALTH OF ALL CHILDREN — Alabama Chapter

DentaQuest FOUNDATION

ADPH — ALABAMA DEPARTMENT OF PUBLIC HEALTH — ADPH.ORG

American Academy of Pediatrics — DEDICATED TO THE HEALTH OF ALL CHILDREN

OUTCOMES

- The availability of supplies, books, brushes, fluoride varnish made the implementation of oral health assessment easier for practices to participate.
- Age-appropriate books assisted in practice workflow and a reminder to provide the risk assessment service at the 12-month well visit.
- The availability of a database to record monthly measures would have elevated the quality of the project measurement.
- Practices' knowledge of dental caries and application of fluoride varnish were significantly increased as a result of this project.
- Alabama Medicaid Agency 1st Look Providers increased by 33 percent from 2017 to 2018 as a result of this program.
- Alabama Medicaid Agency reported an increase of 15.57 percent in Medicaid dental claims/recipients from 2017 to 2018.
- Over 3,983 books have been distributed to children and their families during this project.

"One of the most beneficial aspects of the BBB Project was the emphasis on a structured bedtime routine incorporating good dental hygiene and family reading time to a child."

PAY IT
Forward
A Project of HandsOn River Region

Pay It Forward is a program originally created by the Denta-Health Network in Michigan which is designed to help low-income citizens who don't have dental insurance to get the dental care they need and to give back to the community at the same time.

In 2017, Montgomery dentists, with the support of a community initiative, Envision 2020, decided to bring Pay It Forward to Montgomery. Since that time, little support has been given to continue the program. HandsOn River Region has adopted the program to keep it alive in the community and serves as the lead agency for facilitation. Recognizing the immense potential impact on the community, the Oral Health Office of the Alabama Department of Public Health awarded a renewable grant to HandsOn River Region for the Pay It Forward program in 2017 to help sustain the program and thus becoming a financially supportive collaborative partner.

Those who qualify to receive dental care through the Pay It Forward program make a valuable impact on the River Region by completing hours of volunteer service in return for dental care at participating dental offices.

Pay It Forward is a commitment among River Region dentists to serve individuals with the greatest and most urgent need.

This schedule of services shows the most common services patients need. If a patient wants or needs services not listed in the schedule, the dentist's office will provide an estimate of the volunteer hours required for those services at the patient's First Consult visit.

The schedule shows a range of fees and volunteer hours needed for fillings and removal of teeth (extractions), because these services can be simple or they can be complicated. The dentist's office will provide an estimate of the volunteer hours required at the patient's first visit.

GOAL 2: *Professional Education and Integration*

Current Scope of Work:

Since inception in November 2017, HandsOn River Region has conducted orientations for over 100 potential clients. HandsOn River Region currently partners with the Gift of Life Foundation; a nonprofit charitable organization whose mission is to provide expectant women in the River Region with healthcare. Gift of Life has currently expanded their programs and services to support expectant fathers and connect them with education, training, and services. Through a vetting process with Gift of Life, HandsOn River Region provides a general orientation session quarterly for Gift of Life clients who are interested in the Pay It Forward program. In 2019, Hope Inspired Ministries became a partner agency to recruit clients for the Pay It Forward Program as well. Hope Inspired Ministries trains low-skilled, poorly educated, and/or chronically unemployed men and women to obtain and maintain employment. Through a rigorous 9-week job training program, each student participates in 360 hours of training which includes soft skills, employment skills, financial management, problem solving, and conflict resolution. Each student participates in an internship with a local business. Once the potential client completes orientation, he or she can start to volunteer with nonprofit agencies in the River Region, connecting through the HandsOn River Region Volunteer Management system, to volunteer and bank hours in exchange for dental services.

The HandsOn River Region volunteer network houses over 200 nonprofit agencies in the River Region area who are looking for volunteers. Through the Volunteer Management system, volunteers can track their volunteer hours for verification of volunteerism.

STEP 1: ATTEND
an orientation session and complete necessary paperwork

STEP 2: CONTACT
Pay it Forward Coordinator to schedule initial dental appointment

STEP 3: VOLUNTEER
in the community to earn credit for any follow up treatment

STEP 4: CONTACT
Pay it Forward Coordinator once all volunteer hours are complete

STEP 5: GET TREATED
by a participating dentist using credit earned from volunteer time

Here's How it Works

Service Hours and Fee Schedule

(One hour of service equals $25)

SERVICE	NUMBER OF VOLUNTEER HOURS NEEDED TO PAY FOR SERVICE
First Consultation	6 Hours
Examination and Cleaning	3 Hours
Fillings and Cavities	4-6 Hours
Removal of Teeth (Extractions)	5-11 Hours

Participating Agencies for Pay It Forward Volunteers

19th Judicial Circuit Veterans Court
2019 Alabama Book Festival
211 Connects South Central Alabama
4-H Foundation
AARP Alabama
ACTS of Peace
Adullam House
Aid to Inmate Mothers
Alabama 4-H - Alabama Cooperative Extension System
Alabama Department of Archives and History
Alabama Empowerment
Alabama Goodwill Ambassadors
Alabama Hospital Association
Alabama Interactive
Alabama Kidney Foundation
Alabama Network of Family Resource Centers
Alabama Rural Ministry
Alabama Shakespeare Festival
Alabama Special Olympics
Alabama Sports Festival
Alabama State Capitol
Alabama Supreme Court and State Law Library
Alabama Wildlife Federation
Alacare Home Health & Hospice
Alzheimer's Association
American Cancer Society
American Heart Association
American Red Cross, Central Alabama Chapter
Archibald Senior Center
AUM Nonprofit Leadership Alliance
Autauga County Education Foundation
Autauga Creek Trails, Improvement Committee
Autauga Interfaith Care Center (AICC)
Baptist Health Volunteer Services
Bayard Rustin Community Center
Bombshell Media Group
Boys & Girls Club of the River Region
Boys and Girls Ranches of Alabama
Brantwood Children's Home
Bridge Builders Alabama
Bridges of Faith International Children's Fund
Cancer Wellness Foundation of Central Alabama
Capital Area Adult Literacy Council
Capital City Kiwanis Club
Caravita Retirement Village
Caring for Citizens of Alabama
Catholic Social Services
Center for Child and Adolescent Development
Central Alabama Community Foundation
Central Alabama Veterans Health Care System (CAVHCS)
Child Protect, Children's Advocacy Center
Children's Center of Montgomery
Christ's Kitchen at Christ Lutheran Church
Christmas Clearinghouse
ClefWorks
Cloverdale Playhouse
Combat Cancer Foundation
Common Ground Montgomery
Communities of Transformation
Compassion21
COPE Pregnancy Center
Council on Substance Abuse-NCADD
Dallas County Family Resource Center
Destiny Girls
Dismas Charities Inc.
Dream Court Montgomery
Druids Charity Club
E.A.T. South
Easterseals Central Alabama
Elmore County Food Pantry
Elmore County Technical Center
Emergency Management Agency, Montgomery City-County
Empowering Communities-Helping Ourselves (ECHO)
Equal Justice Initiative
Eve's Circle
Family Guidance Center
Family Promise of Montgomery
Family Sunshine Center
Family Support Center
FedEx Ground
Fishers' Farm
Food For The Hungry
Fort Toulouse - Fort Jackson Park
Freedom Rides Museum
Fresh Start
Friends of the Freedom Rides Museum
Friendship Mission
Gift of Life
Girl Scouts of Southern Alabama
Habitat for Humanity ReStore
Hagar's Hope
HandsOn River Region
Head Start
Healthy Kids Alabama
Heritage Training and Career Center
Homestead Hospice
Hope Inspired Ministries
Hospice of Montgomery
House To House
Humane Society of Elmore County
Humane Society of Montgomery
iHeartMedia
Iron Men Outdoor Ministries, Inc
Jackson Hospital Volunteer Services
John Knox Manor Nursing Home
Joy to Life Foundation
Jubilee Community Center
Kouture Kidz
Lagoon Park Trail Group
Life Changing Mission Outreach
Life On Wheels
Macon East Academy
Main Street Wetumpka
Mary Ellen's Hearth at Nellie Burge
Meals On Wheels-MACOA
Medical Outreach Ministries
Mental Health America in Montgomery
Mid-Alabama Coalition for the Homeless
Montgomery AIDS Outreach, Inc.
Montgomery Area Chamber of Commerce
Montgomery Area Council on Aging (MACOA)
Montgomery Area Food Bank
Montgomery Area Hearing Loss Support Group
Montgomery Area Non Traditional Equestrians (MANE)
Montgomery Ballet
Montgomery Bicycle Club
Montgomery Botanical Gardens
Montgomery Children's Specialty Center
Montgomery Christian School
Montgomery City-County Public Library
Montgomery Community Action Committee
Montgomery County Archives
Montgomery Education Foundation
Montgomery Food for Kids Backpack Program
Montgomery Habitat for Humanity
Montgomery Housing Authority
Montgomery Lions Club
Montgomery Museum of Fine Arts
Montgomery Parks and Recreation
Montgomery Public Schools (MPS)
Montgomery Public Schools Office of Family and Community
Engagement
Montgomery Rescue Mission
Montgomery River Region Friends of AMBUCS
Montgomery S.T.E.P. Foundation
Montgomery Therapeutic Recreation Center
Montgomery Trees
Montgomery Zoo
Motherly Care
Mothers Against Drunk Driving® (MADD)
Muscular Dystrophy Association
National Alliance on Mental Illness (NAMI)
Neighborhood Services
Neighbors In Christ
New Beginnings Educational Center
New Heights for Youth
One Place Family Justice Center
PASS
Positive Parents Have Power
Prattville/Autauga Humane Society
Re-Invention
Reach and Rise
Reality & Truth Ministries
Rebuilding Together Central Alabama
Renascence, Inc.
Respite Care Ministry
Resurrection Catholic Missions
Resurrection Catholic Missions of the South
River City Church
River Region Runners
River Region United Way
Rosa Parks Museum
Salvation Army Montgomery
Save-A-Life of Montgomery
Scott and Zelda Fitzgerald Museum
Second Chance Foundation
Selma to Montgomery National Historic Trail
Service Dogs Alabama
Sickle Cell Foundation of Greater Montgomery
SKIP, Inc.
SouthernCare New Beacon Hospice
SpoilDiva, Inc.
Standing Together Against Rape (STAR)
Successful Living Center
That's My Child
The ARC of Alabama
The Bridge-Davis Treatment Center
The Nehemiah Center
The Wellness Coalition
Tie and Doll
Turning Point Church
Tuskegee Airmen National Historic Site
United Cerebral Palsy of Central Alabama
United Ways of Alabama
VOICES for Alabama's Children
Volunteers of America
W.E.L.C.O.M.E. Center
Wetumpka Depot Players
Women of Refined Gold
Working Woman's™ Home Association
YMCA Camp Chandler
YMCA of Greater Montgomery

GOAL 3:
Health Literacy

GOAL 3: *Health Literacy*

By September 30, 2023, increase knowledge and awareness of the importance of oral health to overall health among health professionals, policy makers, and consumers.

Health literacy is the ability to obtain, understand, and use health information to make appropriate decisions for improved health.

Objective 3.1: Develop and promote consistent messages to educate providers and consumers on oral health through the internet.

3.1.1 Conduct a statewide poll to assess consumer knowledge of oral health and its relevance to overall health including the growing concerns of HPV and its link to oropharyngeal cancer.

3.1.2 Based on the results of the statewide consumer knowledge poll, create a section on the ADPH and Oral Health Coalition of Alabama websites to address oral health common myths.

3.1.3 Include oral health communications in existing social media outlets (Facebook, newsletters, etc.) and link existing outlets to the website.

3.1.4 Identify a website manager that updates the website/educational information and tracks the various stakeholder educational activities.

Objective 3.2: Increase the number of programs and/or interventions that educate parents on how to prevent early childhood caries among children aged 0 – 3.

3.2.1 Develop messages for pregnant women and community organizations that serve children on oral health preventive measures.

3.2.2 Promote fluoride varnish as an early prevention strategy which can be implemented by medical and dental providers.

Objective 3.3: Increase consumer and health care provider use of evidence-based prevention strategies.

3.3.1 Provide information to all health care providers and consumers about the evidence-based oral and systemic links affecting general health.

3.3.2 Partner with local stakeholders to develop and deliver consistent messages on how to prevent oral cancers including HPV related oropharyngeal cancer.

3.3.3 Promote school-based and community-based dental sealant programs.

3.3.4 Work with municipal leaders, local water boards, community leaders and local consumers to promote and expand community water fluoridation within public water systems.

3.3.5 Provide periodic (annual or biennial) statewide conferences for water plant managers and other key employees who provide community water fluoridation.

3.3.6 Partner with the League of Municipalities, Alabama Association of County Commissions, and other key organizations to promote community water fluoridation.

3.3.7 Establish legislation that promotes community water fluoridation.

Objective 3.4 Create and support county advocacy networks across the state of Alabama.

3.4.1 Recruit or identify an Oral Health champion in each legislative district such as the ALDA Dental Professional initiative that identifies a dentist in each legislative district that maintains contact with his/her legislator.

3.4.2 Maintain relationships with state legislators so that oral health is important to them.

Objective 3.5 Collaborate with Alabama's public school systems statewide to increase oral health awareness activities.

3.5.1 Integrate messages about oral health throughout the K-12 school environment (e.g., vending machines, sports events, flyers, posters).

3.5.2 Partner with the school nurses association, Parent Teacher Association (PTA), and other education advocates to integrate the importance of oral health into the school setting.

3.5.3 Educate school nurses, teachers, and parents on evidence-based prevention programs such as dental sealants.

3.5.4 Partner with local and district dental societies and other local dental programs (e.g., Sarrell Dental, FQHC staff) to provide classroom oral health presentations for students and parent presentations at PTA meetings.

Objective 3.6 Collaborate with public and private organizations serving adult and older adult persons to increase oral health awareness activities.

3.6.1 Partner with the Alabama Department of Senior Services to promote oral health.

Objective 3.7: Promote cessation of over-prescribing opioids to patients by following newest ADA guidelines.

3.7.1 Require dentists to continue their education on prescribing opioids and other controlled substances.

3.7.2 Limit the prescribing of opioids to a 7-day period for acute pain.

3.7.3 Encourage all dentists to use the Prescription Drug Monitoring Program (PDMP).

PUBLIC HEALTH DISTRICTS

EAST CENTRAL DISTRICT
Richard Burleson, District Administrator
3060 Mobile Highway
Montgomery, AL 36108
(334) 293-6400
Connie King, Assistant District Administrator
1850 Crawford Rd.
Phenix City, AL 36867
(334) 297-0251

JEFFERSON COUNTY
Mark E. Wilson, M.D., County Health Officer
David Hicks, D.O., M.P.H., Deputy Health Officer
1400 Sixth Ave. S.
Birmingham, AL 35233
(205) 933-9110

MOBILE COUNTY
Bernard H. Eichold, II, M.D.
County Health Officer
Susan Stiegler, Assistant Health Officer
251 N. Bayou St.
Mobile, AL 36603
(251) 690-8827

NORTHEASTERN DISTRICT
Karen Landers, M.D., District Medical Officer
Mary Gomillion, District Administrator
Mark Johnson, Assistant District Administrator
709 E. Broad St.
Gadsden, AL 35903
(256) 547-6311

NORTHERN DISTRICT
Karen Landers, M.D., District Medical Officer
1000 S. Jackson Hwy.
Sheffield, AL 35660
(256) 383-1231
Judy Smith, District Administrator
Michael Glenn, Assistant District Administrator
3821 Highway 31 South
Decatur, AL 35603
(256) 340-2113

SOUTHEASTERN DISTRICT
Corey Kirkland, District Administrator
1781 E. Cottonwood Rd.
Dothan, AL 36301
(334) 792-9070

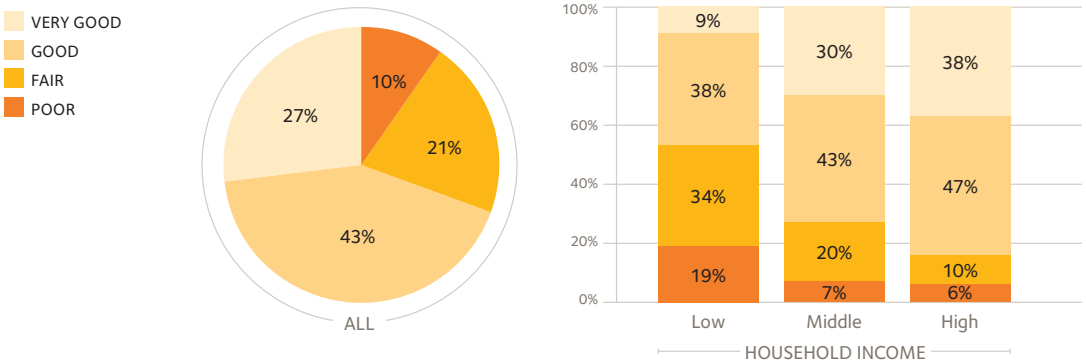
SOUTHWESTERN DISTRICT
Chad Kent, District Administrator
Suzanne Terrell, Assistant District Administrator
1115 Azalea Place
Brewton, AL 36426
(251) 947-1645
303 Industrial Drive
Linden, AL 36748
(334) 295-1000

WEST CENTRAL DISTRICT
Stacey Adams, District Administrator
2350 Hargrove Rd., E.
Tuscaloosa, AL 35405
(205) 554-4500

Oral Health and Well-Being in Alabama

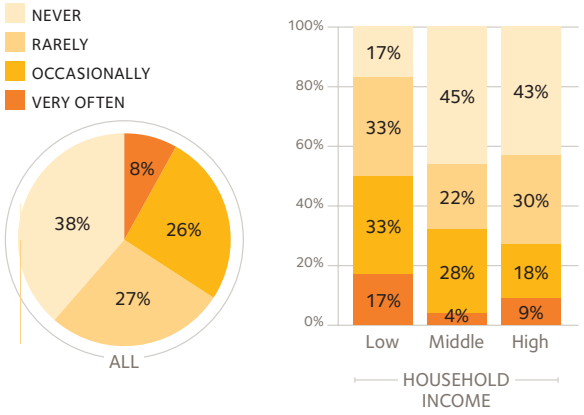
How do adults in Alabama view their oral health? This fact sheet summarizes select data on self-reported oral health status, attitudes and dental care utilization among Alabama adults as of 2015, by income level, based on an innovative household survey. For methods and sources, visit ADA.org/statefacts. For more information on the ADA Health Policy Institute, visit ADA.org/HPI.

Overall Condition of Mouth and Teeth

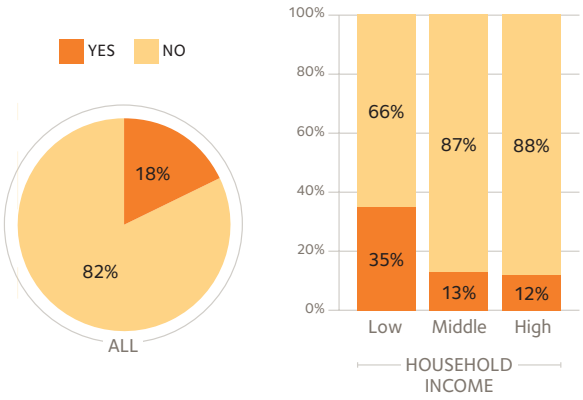


1 in 5 low income adults say their mouth and teeth are in poor condition.

Life in General is Less Satisfying Due to Condition of Mouth and Teeth

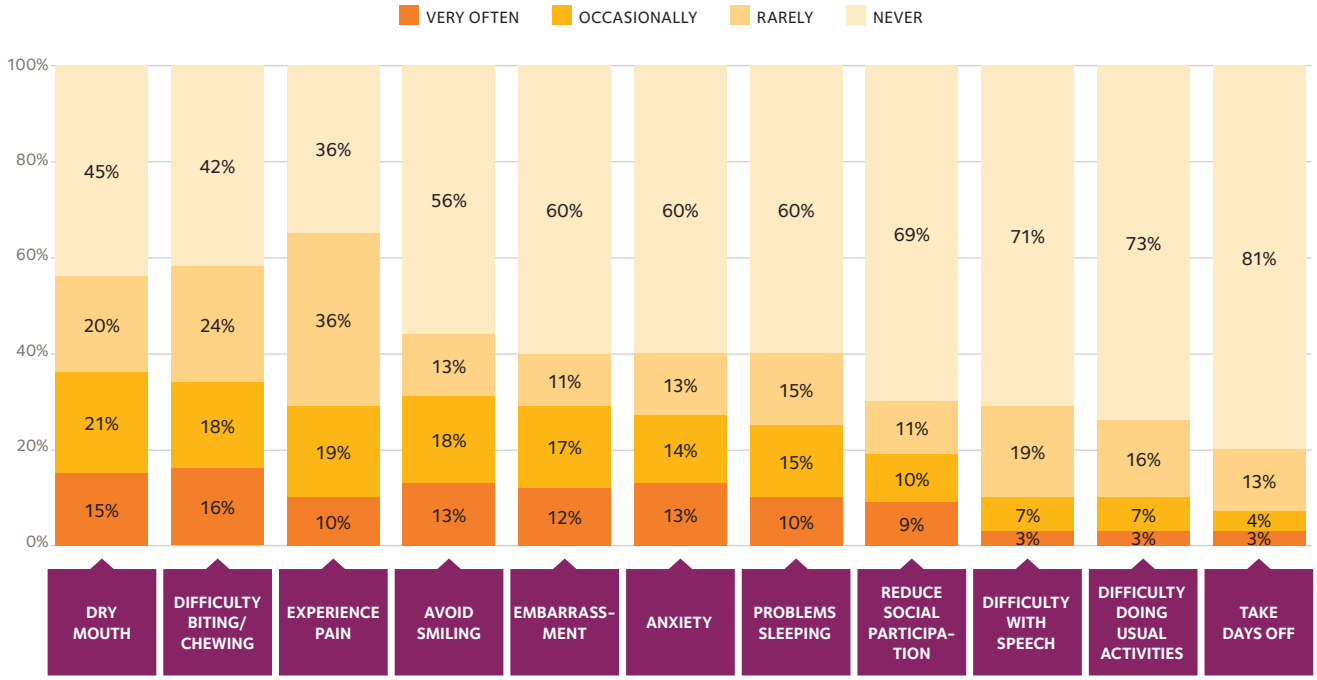


Appearance of Mouth and Teeth Affects Ability to Interview for a Job



Oral Health and Well-Being in Alabama

How Often Have You Experienced the Following Problems in the Last 12 Months Due to the Condition of Your Mouth and Teeth?



3 in 10

adults **avoid smiling** due to the condition of their mouth and teeth.

3 in 10

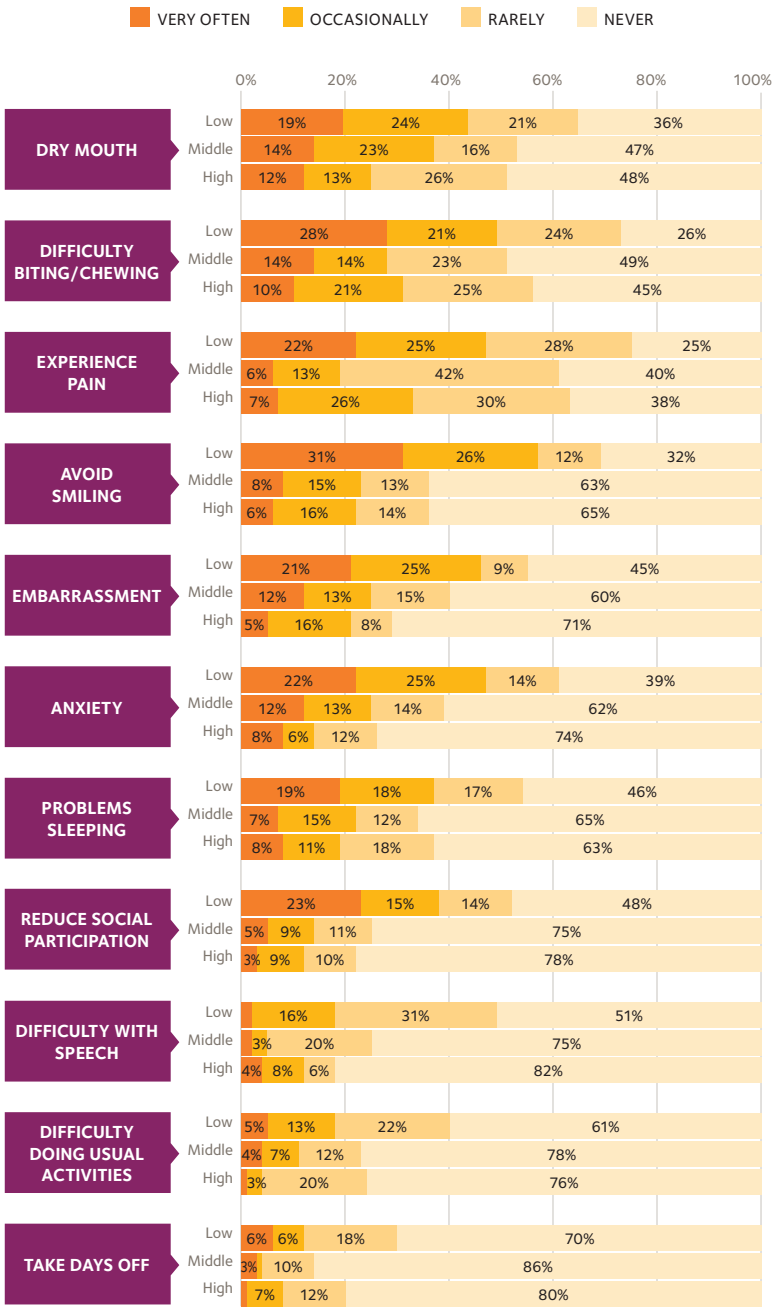
adults **feel embarrassment** due to the condition of their mouth and teeth.

27%

of adults **experience anxiety** due to the condition of their mouth and teeth.

Oral Health and Well-Being in Alabama

Problems Due to Condition of Mouth and Teeth, by Household Income



Low income adults are most likely to report having problems due to the condition of their mouth and teeth.

The top oral health problem for low income adults is **avoiding smiling.**

57% of low income adults avoid smiling due to the condition of their mouth and teeth.

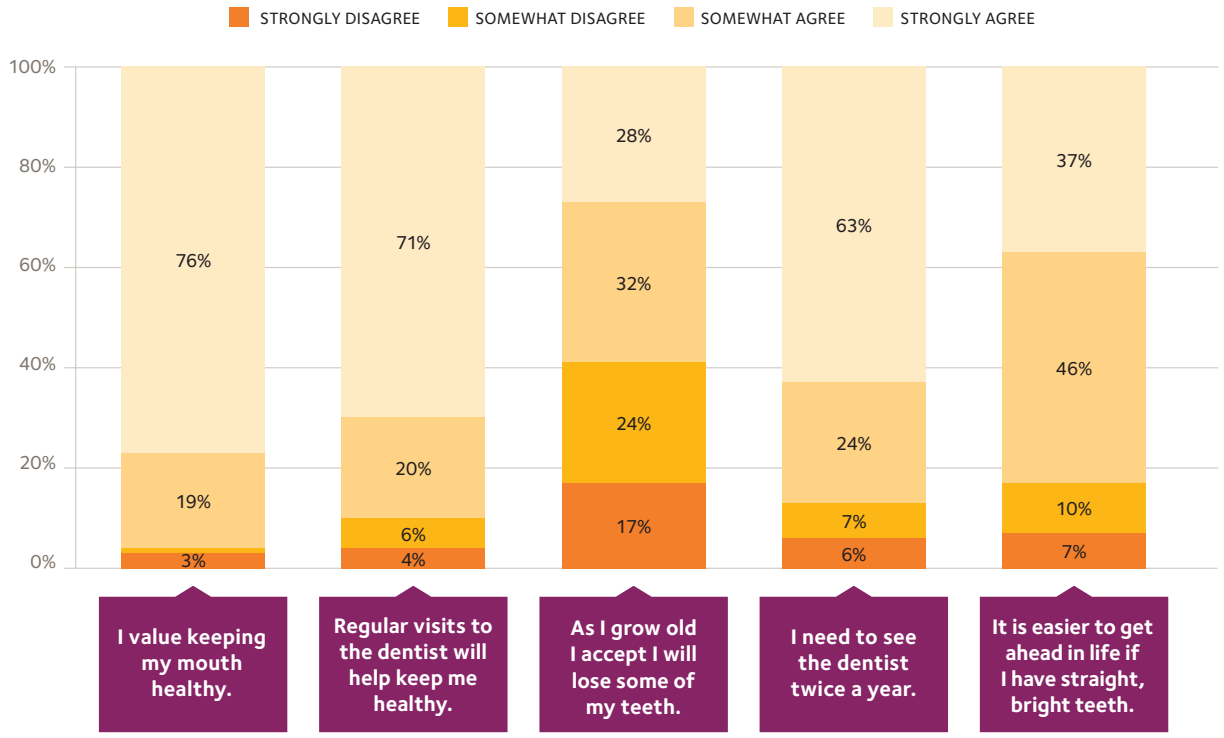
33% of high income adults experience pain due to the condition of their mouth and teeth.

25% of middle income adults feel embarrassment due to the condition of their mouth and teeth.

38% of low income adults reduce participation in social activities due to the condition of their mouth and teeth.

Oral Health and Well-Being in Alabama

Attitudes Toward Oral Health and Dental Care



95% value oral health.

87% feel they need to visit the dentist twice per year.

91% agree regular dental visits keep them healthy.

83% believe straight, bright teeth help you get ahead in life.

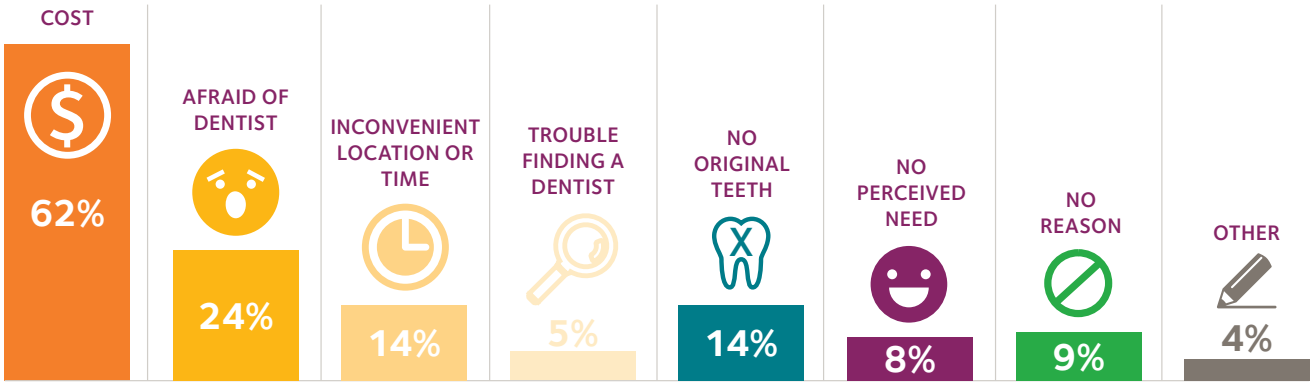
"I accept I will lose some teeth with age."

71% low income adults

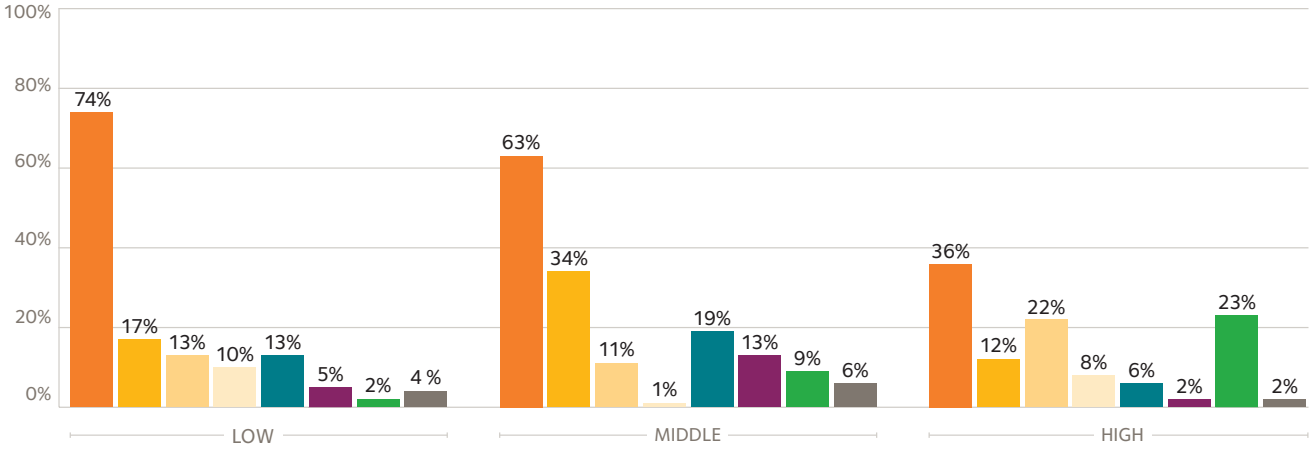
53% high income adults

Oral Health and Well-Being in Alabama

Reasons for Not Visiting the Dentist More Frequently, Among Those Without a Visit in the Last 12 Months



Household Income



17% of low income adults cite fear as a reason not to visit the dentist.

34% of middle income adults cite fear as a reason not to visit the dentist.

23% of high income adults cite no reason for not visiting the dentist.

Oral Health Myths and Realities

DENTIST VISITS

Myth: As long as I visit the dentist every six months, my teeth will be fine.

Reality: Regardless of how often you visit the dentist, you must look after your teeth. You should practice good oral hygiene, consume a healthy diet (with as little sugar as possible), and follow your provider's recommendations.

Myth: Everyone should have a dental check-up every six months.

Reality: For many people, every six months is appropriate. Some people require more frequent check-ups and others less frequent check-ups. It depends on your oral health and risk for disease. Your provider can determine how often you should visit.

Myth: Using a hard toothbrush will clean my teeth better than a soft toothbrush.

Reality: Using a hard toothbrush can result in abrasion and removal of surface area of the tooth. A soft toothbrush – used properly – will clean the teeth with less risk of enamel loss.

Myth: Fluoride is an artificial substance added to toothpaste and water.

Reality: Fluoride is a naturally occurring substance that helps protect teeth from decay by strengthening them.

CAVITIES

Myth: I never had a cavity as a child, so I don't need to worry about getting cavities as an adult.

Reality: While past experience is an indicator for future cavities, many things can change your risk such as a dry mouth because of medication or a change in diet.

WISDOM TEETH

Myth: All wisdom teeth must be removed.

Reality: As long as the wisdom teeth can erupt and function correctly, they do not need to be removed.

GENETICS

Myth: My parents both lost their teeth by the time they were in their 50s. This means I will, too.

Reality: It's not inevitable. To maintain your oral health get regular dental care, follow a healthy diet, and practice good hygiene.

Myth: It's not possible to catch the bacteria that cause tooth decay from another person.
Reality: It's possible. In fact, transmission of the bacteria that cause tooth decay routinely occurs from mothers to infants.

FOOD

Myth: It's okay to drink soda as long as it's diet soda because diet soda does not contain sugar.

Reality: Diet soda is highly acidic and can eat into the surface of the enamel. After that has happened, the enamel is weaker and more at risk for cavities.

CANCER

Myth: Smoking cigarettes can make my teeth discolored, but that's all.

Reality: Smokers have more tooth decay than nonsmokers, more problems with periodontal (gum) disease, and more risk of oral cancer.

Myth: Spit tobacco is safer for my health than smoking because it's not inhaled and doesn't cause lung cancer.

Reality: Spit tobacco is a primary risk factor for oral cancer, for which the five-year relative survival rate is much lower than for breast or prostate cancer.

PREGNANCY

Myth: You shouldn't have any dental work done during pregnancy.

Reality: It's important to have regular check-ups and necessary recommended treatment during pregnancy to help prevent problems. Inform your dental professional that you are pregnant before check-ups and appointments.

Cancer of the Oral Cavity and Pharynx in Alabama

Nationally about 49,670 people will get oral cavity or oropharyngeal cancer in 2017, and though mortality rates have been decreasing, about 19% of these people will die because of these cancers.1 Overall, Alabama has the 6th highest incidence rate for oral cavity and pharynx cancers in the country.2 These cancers are among the top ten most occurring cancers in the state with 754 new cases identified in 2014 alone.

While genetic and environmental factors play a role in the development of these cancers, heavy alcohol and tobacco consumption are considered the primary risk factors.3,4 Most often, these cancers occur on the tongue, gums, floor of the mouth, tonsils and oropharynx (Figure 1). Cancers can be detected by the palpation and visualization of leukoplakia and erythroplakia components at these sites. Early detection is important as the consequences of late stage cancer of the oral cavity and pharynx, and its subsequent treatment, can lead to impaired speech, eating, swallowing and devastating facial disfigurement.

Cancers of the oral cavity and pharynx are described in many ways, and a small subset of these can be further classified by anatomic site preference of the Human Papilloma Virus (HPV; Table 1).

ORAL CAVITY AND PHARYNX CANCER INCIDENCE RATES AND CASES FOR ALABAMA BY HPV OR TOBACCO ASSOCIATION, BY SEX 2012-2016

Cancer Grouping	Male		Female	
	Rate	Cases	Rate	Cases
All Malignant Oral Cavity and Pharynx Cancers	20.4	2,774	7.1	1,110
HPV-Associated* Oropharyngeal Sites	9.4	1,330	2.1	324
Tobacco-Associated Oropharyngeal Sites	11.0	1,444	5.0	786

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are cases are for malignant tumors only.

* Squamous cell carcinomas only (ICD-O-3 histology codes 8050-8084 and 8120-8131) for the following ICD-O-3 site codes: C019, C024, C028, C051, C052, C090, C091, C098, C099, C100, C101, C102, C104, C108, C109, C140, C142, and C148.

All oropharyngeal cancers not associated with HPV are assumed to be associated with tobacco use.

Source: Alabama Statewide Cancer Registry, December 2018.

ORAL CAVITY AND PHARYNX CANCER INCIDENCE RATES AND CASES FOR ALABAMA BY HPV OR TOBACCO ASSOCIATION, BY SEX, 2016 ONLY				
Cancer Grouping	Male		Female	
	Rate	Cases	Rate	Cases
All Malignant Oral Cavity and Pharynx Cancers	20.9	582	7.5	240
HPV-Associated* Oropharyngeal Sites	9.9	287	2.2	69
Tobacco-Associated Oropharyngeal Sites	11.0	295	5.4	171

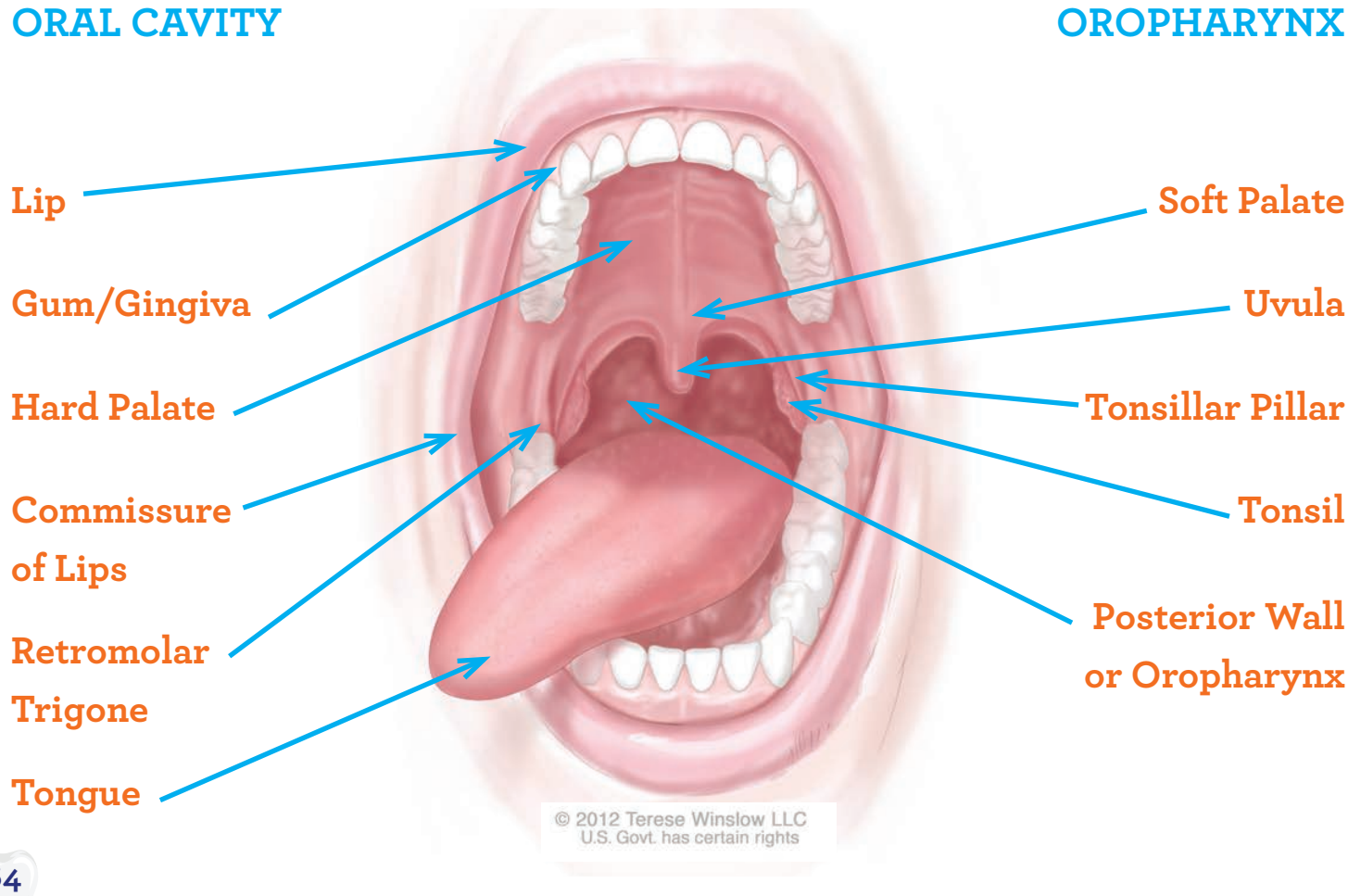
Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are cases are for malignant tumors only.

* Squamous cell carcinomas only (ICD-O-3 histology codes 8050-8084 and 8120-8131) for the following ICD-O-3 site codes: C019, C024, C028, C051, C052, C090, C091, C098, C099, C100, C101, C102, C104, C108, C109, C140, C142, and C148.

All oropharyngeal cancers not associated with HPV are assumed to be associated with tobacco use.

Source: Alabama Statewide Cancer Registry, December 2018.

Figure 1. Schematic of the Oral Cavity and Oropharynx



HPV-associated Oropharyngeal Cancer Trends in Alabama

Rates of oropharyngeal cancers have been steadily rising throughout the country. Over 70% of these cancers are caused by the infection of high-risk HPV Types 16 and 18.5 Oropharyngeal cancer is now the most common HPV-associated cancer in men.

There are distinctions between HPV-associated and non-associated oropharyngeal cancers. They differ in their clinical presentation and patho-biological features, detection, responsiveness to treatment and overall survival.6,7 Further, HPV-associated oropharyngeal cancers are more likely to develop in males that engage in certain sexual behavior but do not smoke or heavily consume alcohol.8

There is new evidence that HPV vaccinations can reduce high-risk HPV oral infections that cause oropharyngeal cancer.

For this project, data was obtained from the Alabama Statewide Cancer Registry (ASCR) for 2005-2014 and divided into two groups: HPV-associated oropharyngeal cancer and comparison cancer sites mostly in the oral cavity (Table 1). Incidence rates were age-adjusted to the 2000 US standard and were calculated per 100,000 persons. The average annual percentage change (APC) was calculated.

A true "HPV-positive" case is different from a "HPV-associated" case. The former indicates that the specimen has been tested specifically for HPV while the latter indicates that the anatomic site of the cancer has histologically known to be associated with HPV. Hence, it should be noted for this analysis, not all HPV-associated cases will directly reflect HPV infection as the Cancer Registry does not explicitly indicate if HPV is present in the tumor for all cases.

State Snapshot

During 2005 to 2014, 7,109 cases of all head and neck cancers were identified in Alabama, with 2,641 of those cases being HPV-associated. The overall state incidence rate for any oral cavity and pharynx cancer was 13.1 per 100,000, but rates varied by county from 8.7 to 18.8 per 100,000.

Table 2. Number of Cases of Malignant Oral Cancers in Alabama, 2005-2014 (N = 7,109)

Race/Gender	HPV Associated	Comparison Group
All Races Males	2,074	2,959
White Males	1,708	2,377
Black Males	343	507
All Races Females	567	1,509
White Females	468	1,212
Black Females	92	263

What's better than a cure for cancer? NOT NEEDING ONE.

HPV Vaccination is Cancer Prevention for at least 6 different types of cancer.

PENILE CANCER | VULVAR CANCER | VAGINAL CANCER | ANAL CANCER | CERVICAL CANCER | OROPHARYNGEAL CANCER

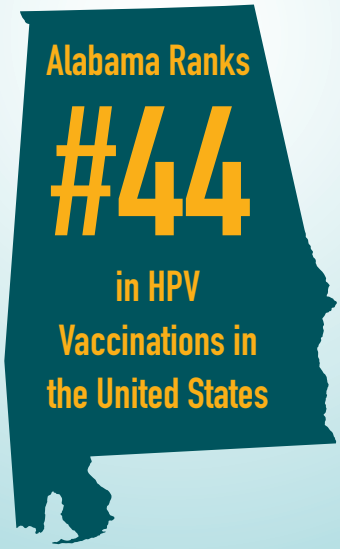
In the U.S., Alabama is...

5th

in rates of oral cavity and oropharyngeal cancer

7th

in rates of oral cavity and oropharyngeal cancer deaths



- Human papillomavirus (HPV) causes around 70% of oropharyngeal cancers
- HPV vaccination can reduce oral HPV infection by 90%
- Smokers are 6 times more likely to get oral cancer
- Frequent alcohol use can increase risk of oral cancer by 6 times

PROMOTE PREVENTION AND EARLY DETECTION BY:

- Vaccinating you or your children against HPV
- Stopping tobacco use and using alcohol in moderation
- Regularly checking your mouth for unusual sores, swelling, areas of red or white lesions
- Asking your dental provider to screen for oral cancers

Talk to a dental healthcare professional about what you can do to prevent oral cancer and...

"WATCH YOUR MOUTH!"

ALABAMA PUBLIC HEALTH

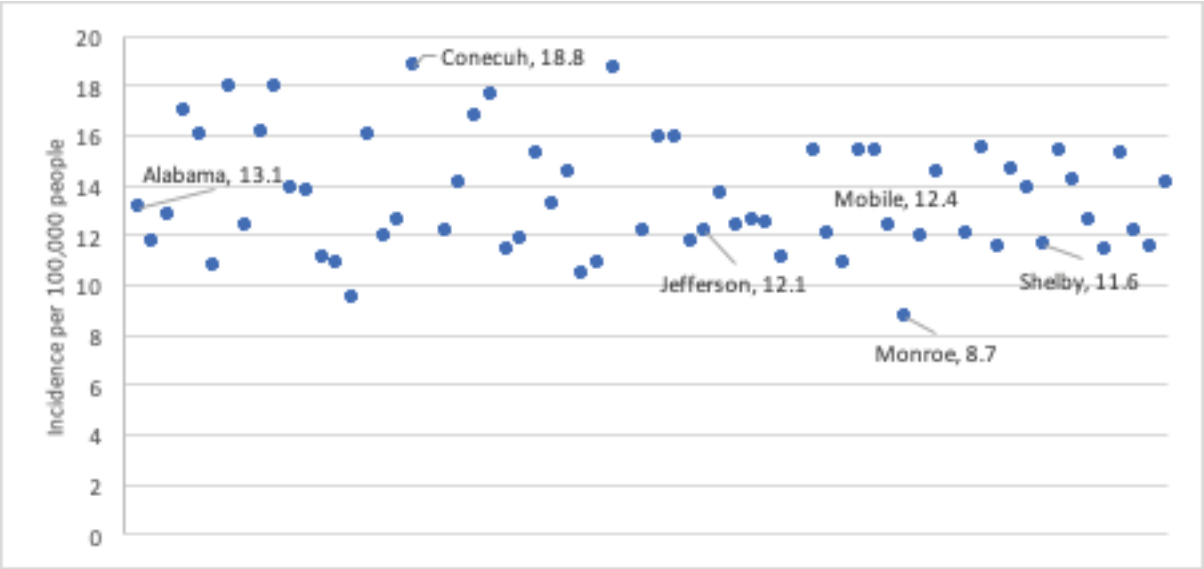
ALABAMAPUBLICHEALTH.GOV/ORALHEALTH

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

IMM Immunization Division · OHCA Oral Health Coalition of Alabama · Sarrell Dental · Alabama Comprehensive Cancer Control Coalition · ALDA Alabama Dental Association · DentaQuest · MCHD mobile county health department · JCDH Jefferson County Department of Health · UAB Health Mitchell Cancer Institute · UAB Medicine Oral and Facial Surgery · UAB School of Dentistry The University of Alabama at Birmingham · American Academy of Pediatrics Alabama Chapter · Franklin Primary Health Center, Inc.

Alabama Adolescent Vaccination Task Force • Tuscaloosa County Health Department • Alabama Department of Public Health Tobacco Prevention and Control Branch

Figure 2. Oral Cavity and Pharynx Cancer Incidence Rates by Alabama Counties 2005-2014



As consistent with national trends, the incidence rates of HPV-associated oral and pharyngeal cancer are increasing, especially in males. The age-standardized incidence rate in men increased from 6.7 per 100,000 in 2005 to 9.9 per 100,000 in 2014 (APC, 3.0%; 95% CI, 1.1–4.9; p=.006). In contrast, there was a statistically significant decline (APC, -2.6%; 95% CI, -3.3– -1.7; p<.001) in incidence rates of non-HPV associated cancers within the same time period 2014 (Figure 3). The incidence rates of HPV associated cancers in female Alabamians remained relatively stable during the period of 2005 to 2014, and those of non-HPV associated cancers saw a non-statistically significant decline (Figure 4).

Figure 3. Oral and pharyngeal cancer incidence rates in Alabama males

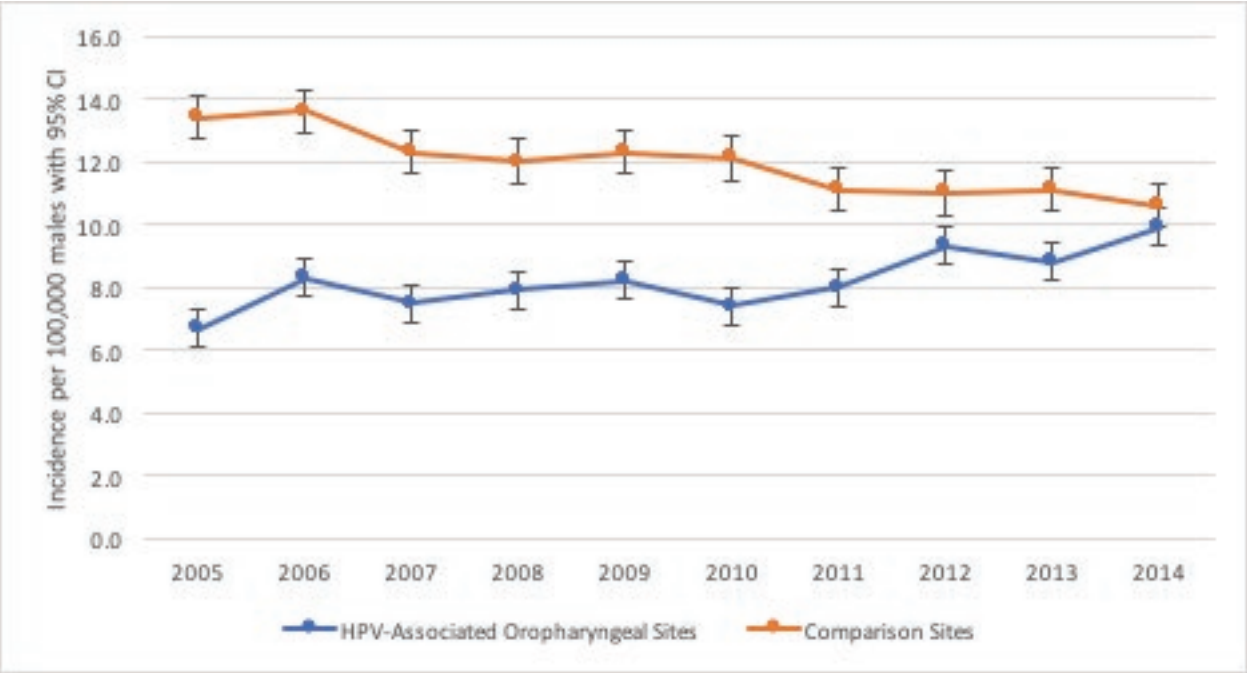
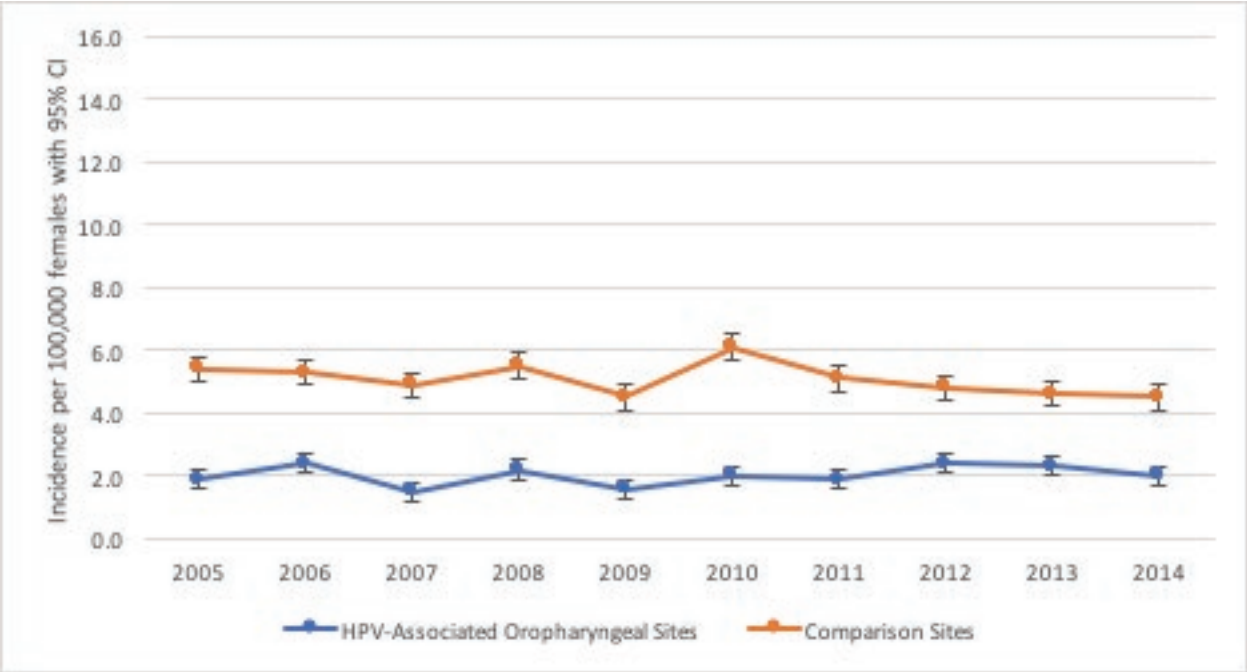


Figure 4. Oral and pharyngeal cancer incidence rates in Alabama females



The age at diagnosis of both groups was assessed (Figures 5 and 6). On average, HPV-associated cancers were diagnosed in men at 60 years, as compared to age 63 for cancers at other sites in the oral cavity. Among women, HPV-associated cancers were first diagnosed at around 62 years and non-HPV-associated cancers were diagnosed at about age 66.

Figure 5. Distribution of age at oral and pharyngeal cancer diagnosis among males in Alabama, 2005-2014

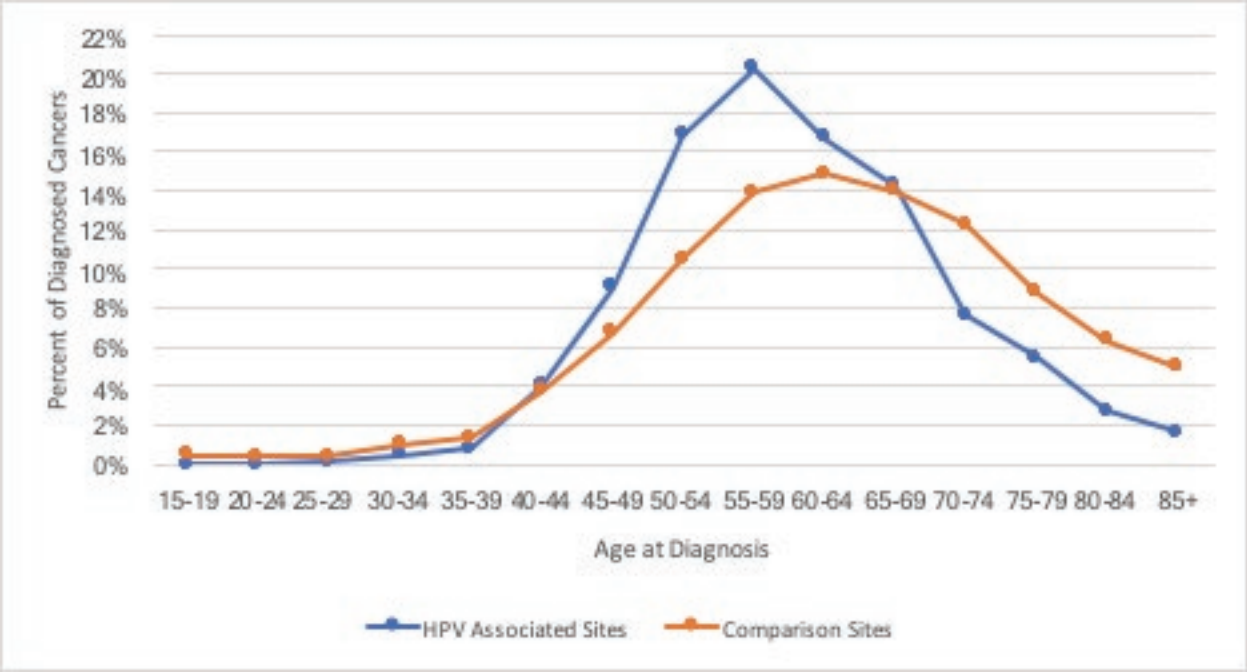
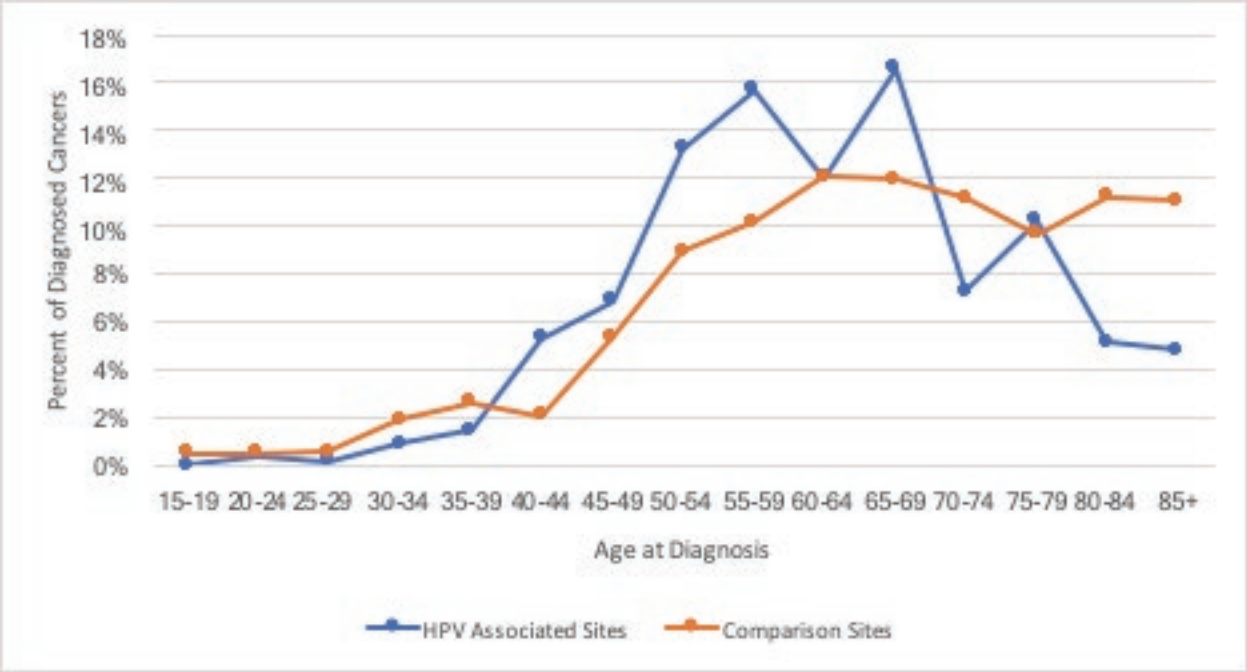


Figure 6. Distribution of age at oral and pharyngeal cancer diagnosis among females in Alabama, 2005-2014



Implications for Oral and Pharyngeal Cancer Prevention and Control

Surveillance of the Alabama State Cancer Registry confirms an alarming rise in HPV-associated oropharyngeal cancers within the state. In particular, the incidence rates of these cancers increased significantly among males to 8.7 per 100,000 in 2010-2014. In contrast, the state incidence rate for anal and penile cancer during that timeframe was 1.8 and lower than 1 per 100,000, respectively. Cancer of the oropharynx is the most common HPV-associated cancer among Alabamian males.

Tobacco and alcohol use remain the primary risk factors for most oral cavity and pharyngeal cancers. As such, dental and medical clinicians in Alabama should underscore the importance of tobacco cessation and limited alcohol intake for the prevention of head and neck cancer. Dentists should also be aware that patients with no history of tobacco or heavy alcohol use can still develop HPV-associated oral cancers.

Lastly, there is a need for more research to understand the relationship and potential effectiveness of HPV immunizations and the subsequent reduction and prevention of oropharyngeal cancers in Alabama.

Why is Dental Health So Important?

Your mouth "talks" to your body...

...and your body "talks" to your mouth...

Gum disease increases the risk of **head and neck cancer.**
- American Academy of Oral Systemic Health

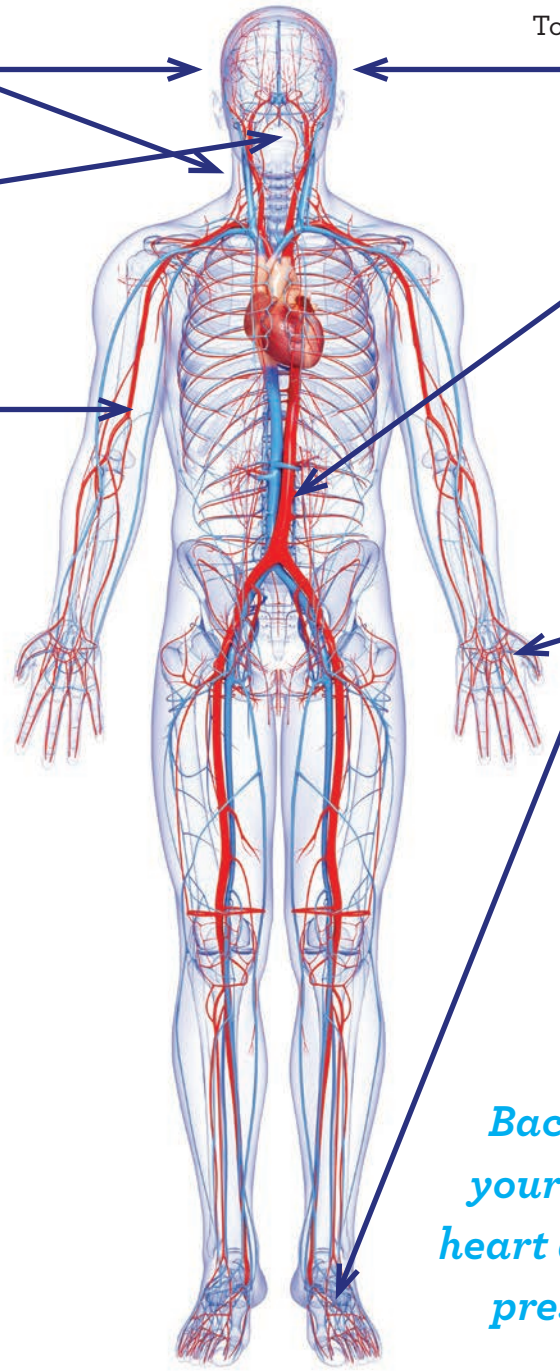
Cavities are caused by a germ that spreads while kissing and sharing food.
- AAOSH

Bacteria in your mouth travel to other parts of your body in your bloodstream.
- AAOSH

Diabetes and bleeding gums increases risk of **premature death** by 400-700 percent.
- AAOSH

Pregnant women with gum disease have only 1 in 7 chance of giving birth to a healthy child of normal size.
- AAOSH

People with gum disease are *twice* as likely to die from **heart disease** and *three times* as likely to die from **stroke.**
-Mayo Clinic



Tooth loss and gum disease increase the risk of **Alzheimer's** disease.
-Mayo Clinic

Gum disease increases **pancreatic and kidney cancer** risk by 62%.
- Harvard

93% of people with gum disease are at risk for **diabetes.**
- AAOSH

Research has found an association between gum disease and **rheumatoid arthritis.**
- American Academy of Family Physicians

The Surgeon General reports that at least 47% of the U.S. population ages 30-74 have gum disease.
- AAOSH

Bacteria that live in your mouth can cause heart disease, high blood pressure and stroke

Source: American Academy of Oral Systemic Health, https://www.heritagedentalva.com/files/2014/03/infographic-oralsystemichealth.jpg

References

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5. Chaturvedi AK, et al. Human papillomavirus and rising oropharyngeal cancer incidence in the United States. Journal of Clinical Oncology. 2011 Oct 3;29(32):4294-301.

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10. Alabama Public Health. (2017) Alabama Statewide Cancer Registry. Retrieved from: http://www.alabamapublichealth.gov/ascr/index.html

70% of tobacco users want to quit.
Coaching and nicotine replacement therapy doubles your patient's chances of successfully quitting.
Treatment is available for users of any tobacco product containing nicotine (cigarettes/cigars/cigarillos, dip/snuff, e-cigarettes/vape, hookahs/pipes, etc.)
Alabama Tobacco Quitline treatment is free and includes coaching and nicotine replacement therapy "if medically eligible and enrolled in coaching."

ASK ABOUT NICOTINE USE + ENCOURAGE CESSATION + REFER TO QUITLINE (1-800-QUIT-NOW)

COMPREHENSIVE CANCER CONTROL COALITION ALABAMA

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

ALABAMA PUBLIC HEALTH

MORE THAN A THIRD OF SMOKERS HAVE AT LEAST THREE DENTAL HEALTH ISSUES.

Vaping and e-cigarettes are just as harmful as conventional tobacco to a patient's oral health.
Alabama is #7 in the US for oral cavity and pharynx cancer mortality.
31.3% of cancer deaths in Alabama are attributable to smoking.
The Surgeon General has declared that e-cigarette use has reached epidemic proportions;
E-cigarette use has increased 78% among teens from 2017-2018.

MORE THAN A THIRD OF SMOKERS HAVE AT LEAST THREE DENTAL HEALTH ISSUES.

Alabama Tobacco Quitline Referral Instructions

1-800-Quit-Now • 1-800-784-8669

QuitNowAlabama.com

Free tobacco cessation coaching is provided through the Alabama Tobacco Quitline.

Consent forms can be found at www.quitnowalabama.com. Consent form must be signed by the patient to be valid.

NON-MEDICAID PATIENT

1. Fill out QuitNow Referral Form and have patient sign.
2. Fax form to 1-800-692-9023.
3. Once patient is enrolled in coaching, up to 8 weeks of nicotine replacement therapy patches will be provided, so long as patient is medically eligible and remains in coaching program.

MEDICAID PATIENT

1. Fill out QuitNow Referral Form and have patient sign.
2. Fill out Medicaid Smoking Cessation Prior Authorization Request Form.
3. Fax both forms to Health Information Designs at 1-800-748-0116.
4. Fax QuitNow Referral Form only to 1-800-692-9023.
5. Give the prescription to the patient or send to pharmacy. Advise the patient to wait 24 hours before picking up prescription to give Medicaid time for approval process.

* Nicotine patches, gum, lozenges, inhalers, nasal spray, varenicline (Chantix), and bupropion SR (Wellbutrin) are approved cessation medications for Medicaid-Patients to be prescribed by the referring provider.

SELF-REFERRED PATIENT

1. Any Alabama resident may self-refer to the Quitline by calling 1-800-QUITNOW or 1-800-784-8669 to enroll in the free program.

Prescription Opioid Usage

Alabama Medicaid Agency (AMA) 2016 Report

Alabama is the "highest opioid prescribing state" in the U.S. *(CDC Vital Signs, 2014)*

What Are Opioids?

Opioids are substances that act on opioid receptors to produce morphine like effects. They are used to treat acute and chronic pain.

Examples of generic opioids: morphine, hydrocodone, oxycodone and fentanyl

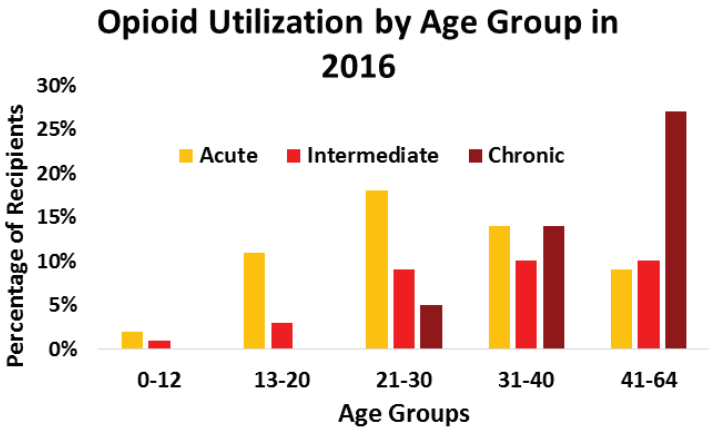
Examples of brand opioids: Norco, Percocet, OxyContin, Vicodin, Dilaudid , Lortab and Duragesic

Rate of Adults (19-64) with an AMA Opioids Claim by Race in 2016 per 1,000

400	350	300
Whites	Blacks	Others

Rate of Adults (19-64) with an AMA Opioids Claim by Gender in 2016 per 1,000

400	290
Females	Males



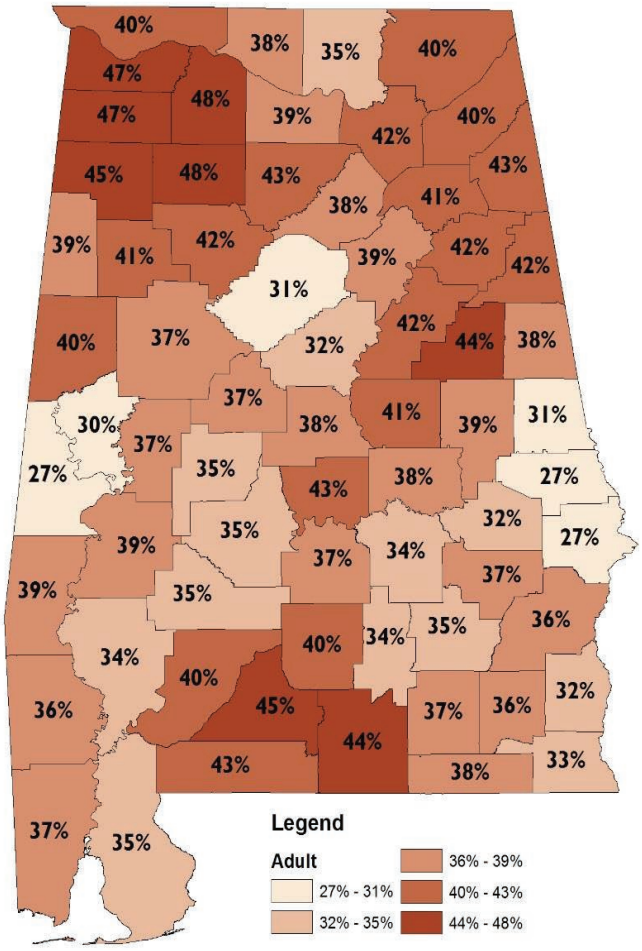
Opioid Utilization in a Year

Acute: 1 to **7 days supplied.**
Intermediate: 8 days to **30 total days supplied.**
Chronic: more than **30 total days supplied.**

Overview

- In 2014, Alabama had nearly **3 times** more opioid prescriptions than the lowest prescribing state, Hawaii. [CDC, 2014]
- In 2016 , **37 %** of AMA members **aged 19 to 64** had an AMA opioid claim.
- In 2016, AMA members with opioid claims **aged 19 to 64** had an average of **4.0 opioid claims.**
- The average days supplied for AMA members with opioid claims in 2016 **was 7.6 for children (0 12), 7.8 for teenagers (13 18) and 73.2 for adults (19 64).**

Percentage of Adults (19-64) with an AMA Opioid Claim by County in 2016



Source: Alabama Medicaid Agency paid claims for calendar year 2016.

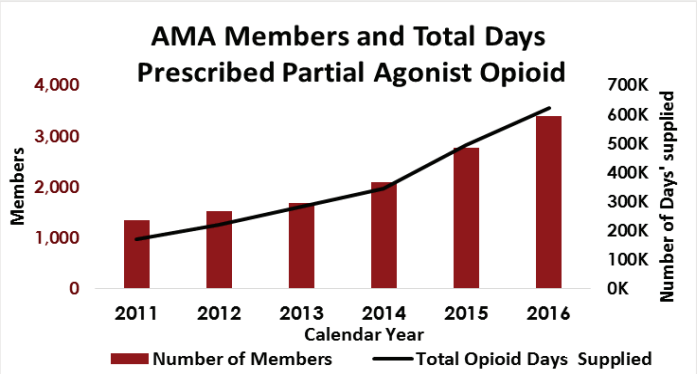
Types of Opioids

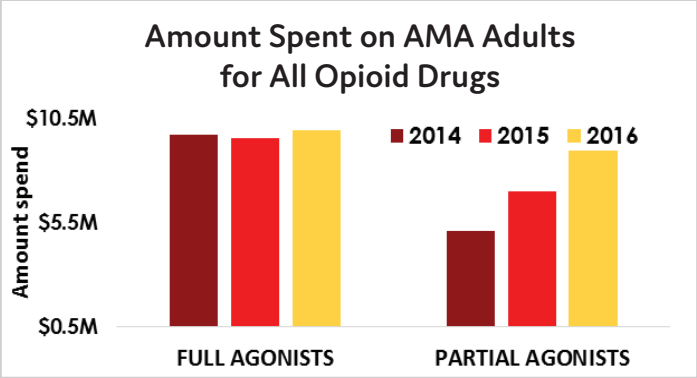
Opioid receptors are molecules in the brain to which opioid drugs attach and through which they exert their effects. These receptors then have analgesic, euphoric and addictive effects. Three types of opioid drugs are:

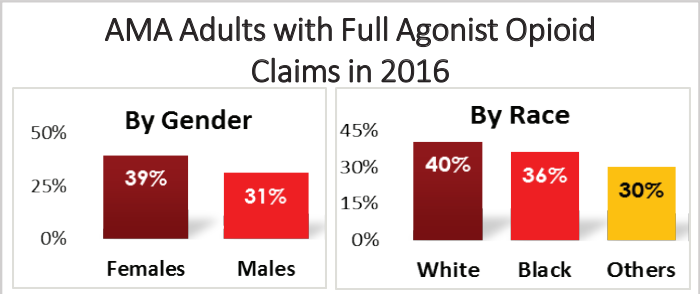
- **Full Agonist** — Drugs that activate opioid receptors in the brain resulting in a full opioid effect. Full agonist drugs have maximum addictive effect and abuse potential. Examples: oxycodone, methadone, hydrocodone, morphine, heroin (illicit drug)
- **Partial Agonist** — Drugs that activate opioid receptors but not to the same degree as full agonists. Partial agonists are used to treat opioid addiction and as a mild analgesic. Example: buprenorphine, nalbuphine
- **Antagonist** — Drugs that effectively block opioid receptors and prevent agonists from activating them. Antagonists are primarily used in overdose cases. Example: Naloxone and Naltrexone

Source- https://www.ncbi.nlm.nih.gov/books/NBK64236/

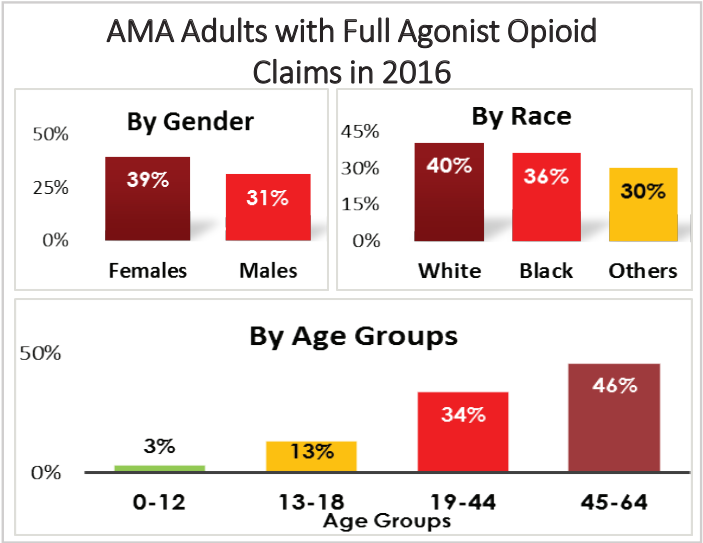
Top Opioid Providers for Adults (19-64) by Number of Days' Supplied in 2016	
OPIOID FULL AGONIST:	
Family Practitioner	1,629,491
Internal Medicine	1,102,962
Anesthesiologist	644,494
General Practitioner	533,928
Emergency Medicine Practitioner	279,636
Physical Medicine and Rehabilitation Practitioner	244,153
Federally Qualified Health Clinic (FQHC)	227,930
Orthopedic Surgeon	226,786
Rural Health Clinic	221,676
Obstetrician/Gynecologist	215,070
OPIOID PARTIAL AGONISTS:	
Family Practitioner	174,516
Internal Medicine	82,203
General Practitioner	75,650
Psychiatrist	69,053
Emergency Medicine Practitioner	61,474
Obstetrician/Gynecologist	52,630
Anesthesiologist	20,906
Radiologist	17,676

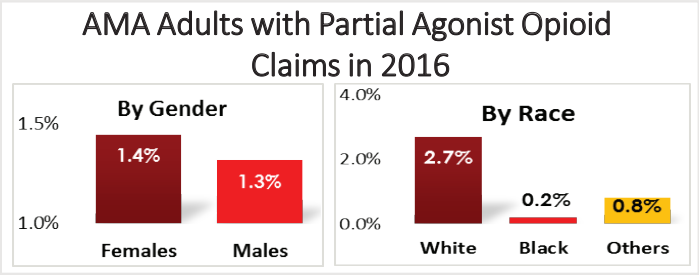






Source: Alabama Medicaid Agency paid claims for calendar year 2016.





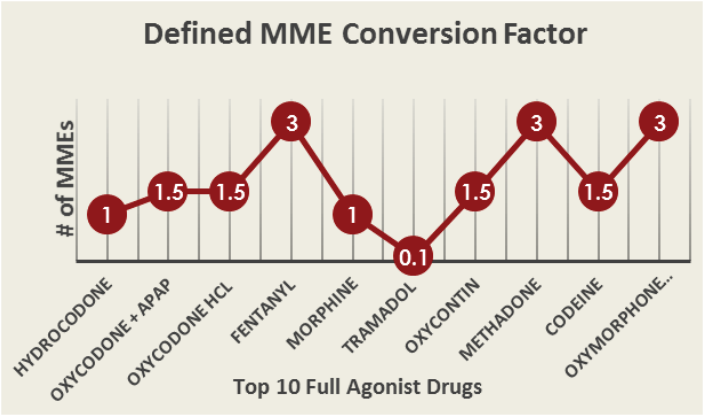
Full Agonist Opioids

Morphine Milligram Equivalents (MMEs)

MMEs: Daily morphine milligram equivalents, also called **morphine equivalent daily dose** (MEDD), are used to assess comparative potency of opioids, but not to convert a particular opioid dosage from one product to another. The calculation to determine morphine milligram equivalents includes drug strength, quantity, days supply and a defined conversion factor unique to each drug.

- Medicaid is currently using CMS calculation for MMEs [CDC,2014].

Full Agonist Prescribing Statistics			
Year	Average Monthly Members	Average Monthly Quantity Dispensed	Annual Avg. Daily MMEs Per Member
2011	35,675	2,250,143	19.7
2012	36,352	2,332,662	20.6
2013	35,030	2,255,550	20.6
2014	32,487	2,016,634	20.8
2015	30,557	1,846,056	21.3
2016	29,425	1,773,950	21.7
% Change 2011-2016	-17.5%	-21.2%	9.8

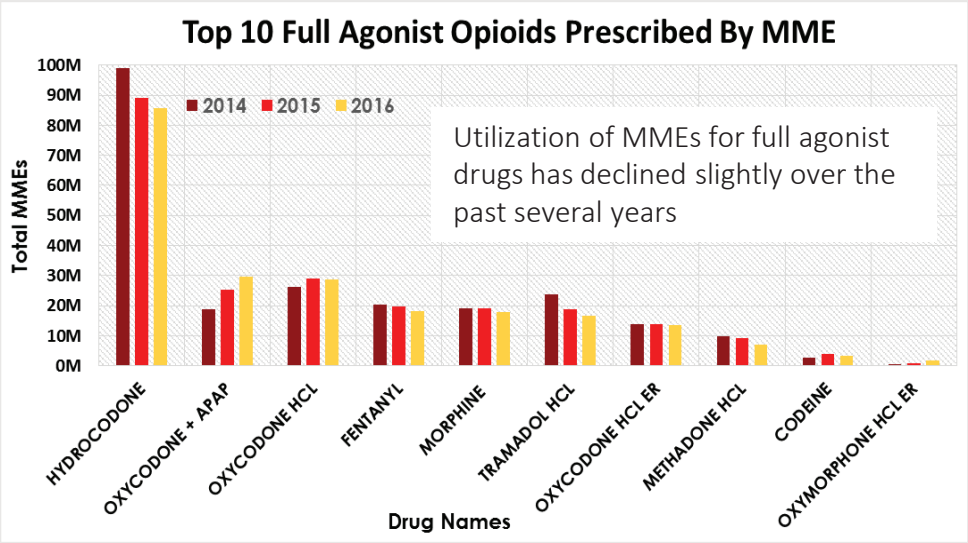


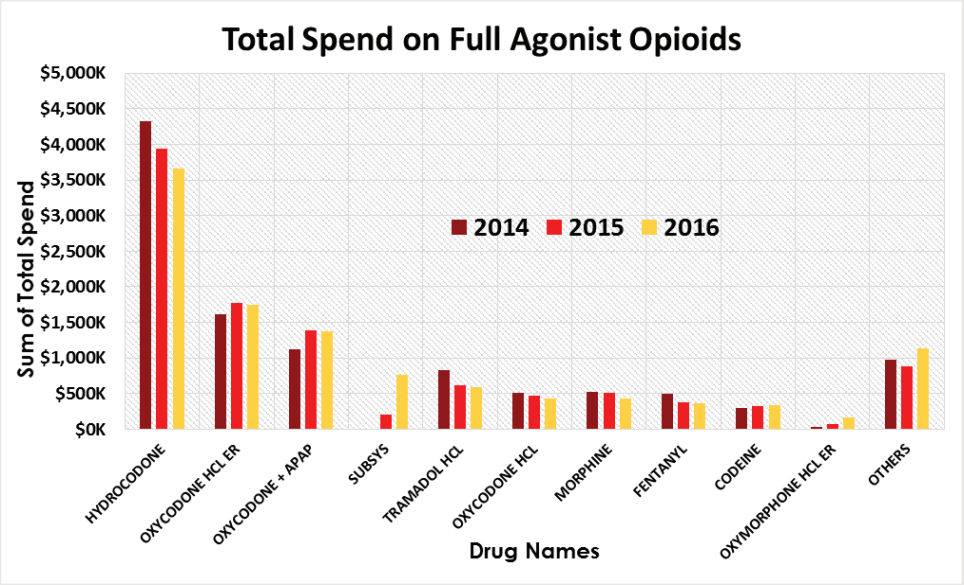
SAMA covers methadone for pain.
Medication assisted treatment [MAT] is covered by the Alabama Department of Mental Health.

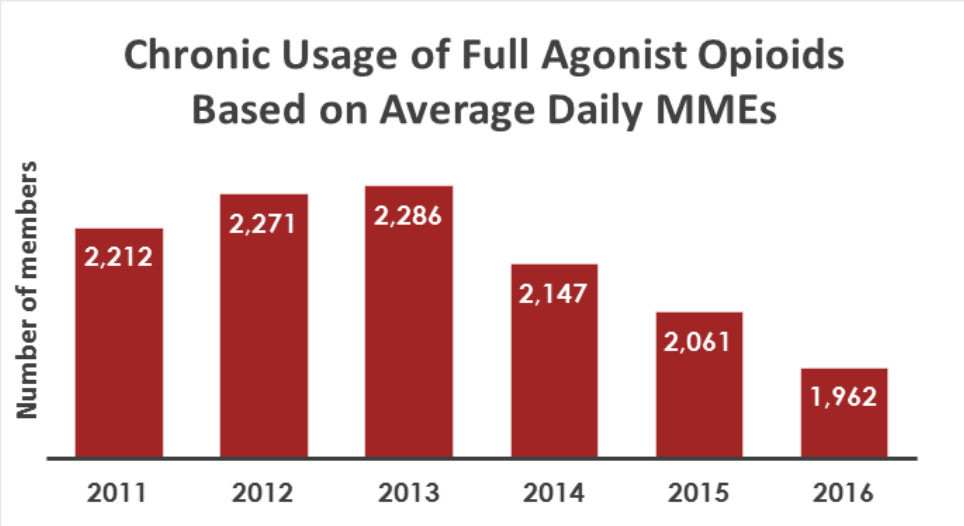
Data Source and Methodology

- Source: AMA paid claims.
- Medicaid members who were Medicare eligible (duals) or only had partial medical coverage were excluded.
- Population groups are: children 0-12, teenagers 13-18, adults 19-64.
- Members above the age of 64 were not included because most were Medicare eligible.

Source: Alabama Medicaid Agency paid claims for calendar year 2016.





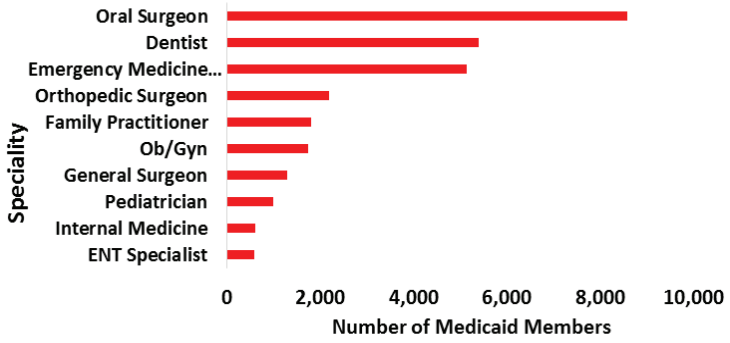


Members prescribed >100 MMEs per day for >30 days in a year.

Source: Alabama Medicaid Agency paid claims for calendar year 2016.

Opioid Prescribing to Teenagers (13-18)

Top Opioid Prescribing Providers to Teenagers in 2016



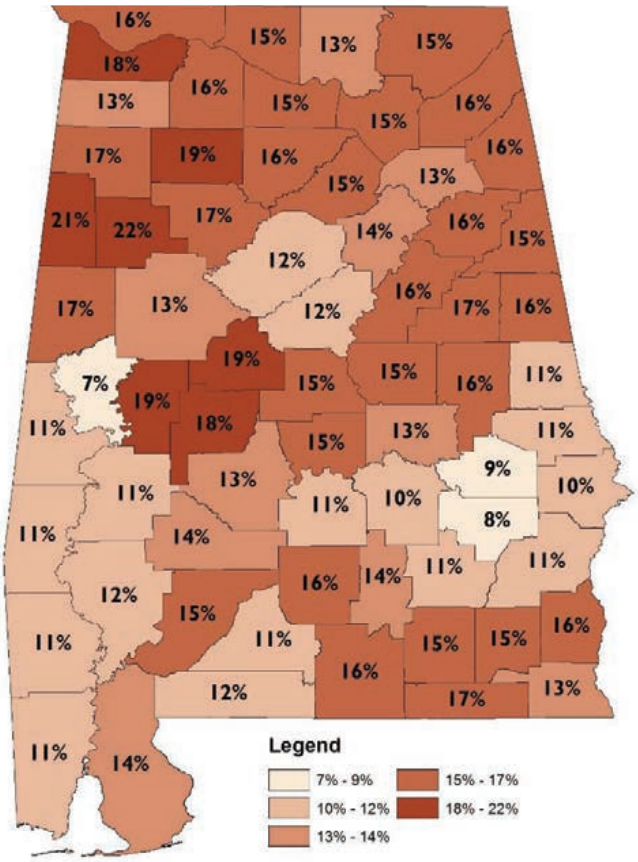
Dental Analysis of AMA Teenagers

- 50.8% received any dental services.
- 12.9% received opioids after any dental services.
- 62.6% received opioids after any tooth extractions.
- 78.6% received opioids after 3rd molars (wisdom teeth) extraction.
- 2.0% received opioids after a restorative (filling) treatment.

ADA recommends using non-Opioids as the first-line therapy for acute pain management.

- Journal of American Dental Association, August 2016

Percentage of Teenagers with an AMA Opioid Claim by County in 2016



Neonatal Abstinence Syndrome

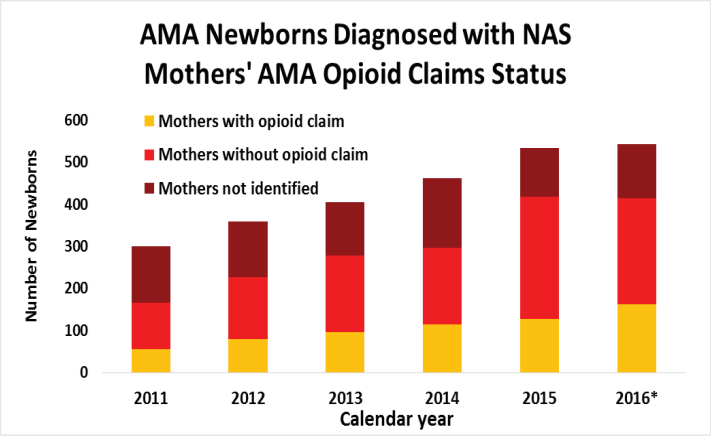
Neonatal Abstinence Syndrome (NAS)

Drug withdrawal syndrome in newborns caused primarily by in utero exposure to opioids. [CDC]

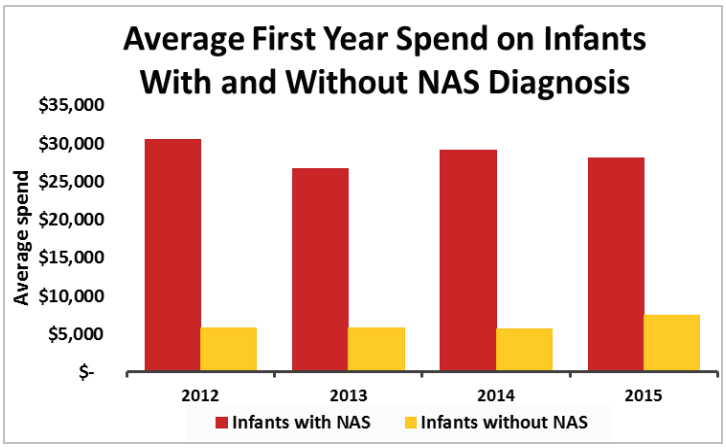
Rate of Infants with NAS by Race in 2015 per 1,000 Births

19	3	4
Whites	Blacks	Others

Source: Alabama Medicaid Agency paid claims for calendar year 2016.



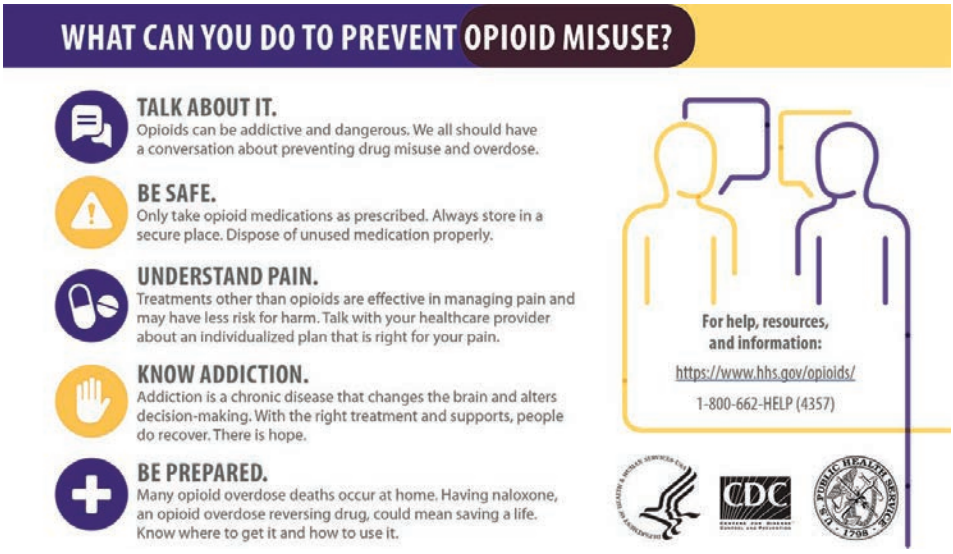
** Data available through October 2016*



2016 data for total spend is not complete

Prescription Drug Monitoring Program (PDMP)

The Prescription Drug Monitoring Program (PDMP) is a program developed to promote the public health and welfare by detecting diversion, abuse, and misuse of prescription medications classified as controlled substances under the Alabama Uniform Controlled Substances Act.



About PDMP

PDMP is a program developed to promote the public health and welfare by detecting diversion, abuse, and misuse of prescription medications classified as controlled substances under the Alabama Uniform Controlled Substances Act. Under the Code of Alabama, 1975, § 20-2-210, et seq., the Alabama Department of Public Health (ADPH) was authorized to establish, create, and maintain a controlled substances prescription database program. This law requires anyone who dispenses Class II, III, IV, V controlled substances to report daily the dispensing of these drugs to the database. The deadline for mandatory enrollment by dentists possessing an active Alabama Controlled Substance license was October 1, 2018.

Goals

The goals of the Alabama Prescription Drug Monitoring Program are:

- To provide a source of information for practitioners and pharmacists regarding the controlled substance use of a patient;
- To reduce prescription drug abuse by providers and patients;
- To reduce time and effort to explore leads and assess the merits of possible drug diversion cases; and
- To educate physicians, pharmacists, policymakers, law enforcement, and the public regarding the diversion, abuse, and misuse of controlled substances.
- The Alabama Prescription Drug Monitoring Program is part of the ADPH Pharmacy Division.

American Dental Association Policy on Opioid Prescribing (2018)

Resolved, that the ADA supports mandatory continuing education (CE) in prescribing opioids and other controlled substances, with an emphasis on preventing drug overdoses, chemical dependency, and diversion. Any such mandatory CE requirements should:

1. Provide for continuing education credit that will be acceptable for both DEA registration and state dental board requirements,
2. Provide for coursework tailored to the specific needs of dentists and dental practice,
3. Include a phase-in period to allow affected dentists a reasonable period of time to reach compliance,

and be it further

Resolved, that the ADA supports statutory limits on opioid dosage and duration of no more than seven days for the treatment of acute pain, consistent with Centers for Disease Control and Prevention (CDC) evidence-based guidelines, and be it further

Resolved, that the ADA supports improving the quality, integrity, and interoperability of state prescription drug monitoring programs.

American Dental Association

October 2018

GOAL 4:
Data and Surveillance

GOAL 4: *Data and Surveillance*

By September 30, 2023, provide continuous, systematic collection, analysis and interpretation of oral health data for the planning, implementation, and evaluation of oral health needs for all populations throughout the state.

Objective 4.1: Provide oral health data collection on school-aged children through cooperative agreements with Alabama public school systems, non-profit dental providers, private dental providers and others.

4.1.1 Conduct a statewide Basic Screening Survey (BSS) for Kindergarten and 3rd grade children at least every 5 years.

4.1.2 Collaborate with other dental programs (non-profit, private practice dentists) that currently collect oral health data on school-aged children (using the BSS screening tool) and pursue oral health data sharing agreements.

Objective 4.2: Collect oral health data on older adults through older adult centers, long term care programs, assisted living, and other designated older adult programs/facilities that serve person >65 years of age.

4.2.1 Conduct a statewide BSS for older adults at least every 5 years.

4.2.2 Collect area wide BSS for older adults through partnership between UABSOD Geriatric Dentistry Program and Alabama Department of Senior Services.

4.2.3. Add dental questions on the number of older adults with no teeth and questions linked to other older adult diseases that correlate with dental disease (e.g., diabetes, hypertension) to the CDC Behavioral Risk Factor Surveillance System (BRFSS) report.

4.2.4. Access oral cancer data on senior adults through Alabama Cancer Registry.

4.2.5 Access craniofacial, cleft lip, and cleft palate data.

Objective 4.3: Increase data collection of at-risk pregnant women accessing dental services during pregnancy.

4.3.1 Pursue data sharing of pregnant women accessing dental services with Alabama Medicaid.

4.3.2 Increase dental questions pertaining to dental visits during pregnancy through the Pregnancy Risk Assessment Management Survey (PRAMS).

4.3.3 Continue collecting dental visit data through select ADPH county health department social workers who provide maternity care coordination.

Objective 4.4: Increase data collecting and reporting on Community Water Fluoridation (CWF) through the ADPH Office of Oral Health.

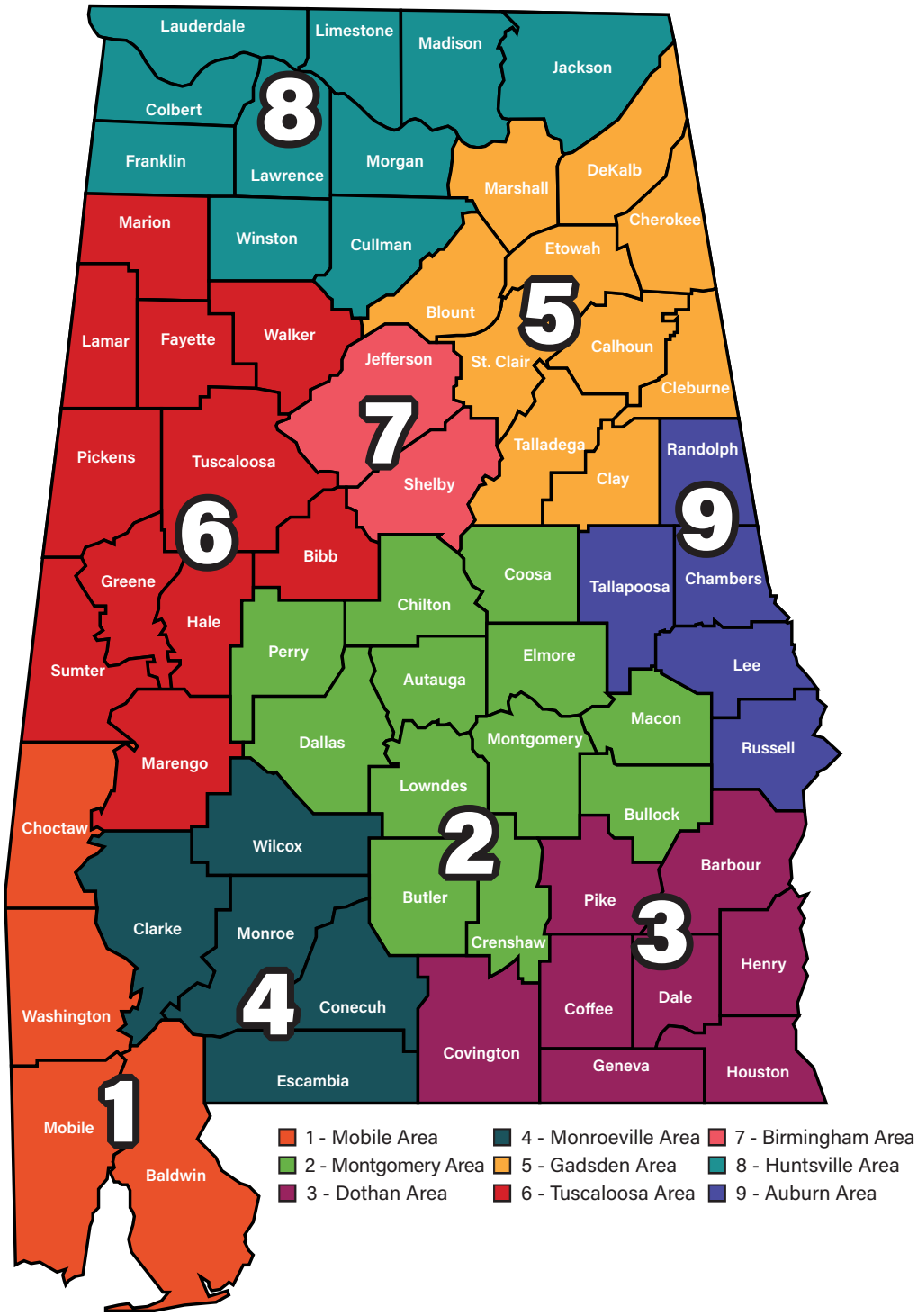
4.4.1 Collect and enter monthly CWF data in the CDC Water Fluoridation Reporting System (WFRS).

4.4.2 Increase the collection and submission of split sample reports by County Health Department environmentalists.

4.4.3 Assure timely submissions of Monthly Operational Reports to the Office of Oral Health through email communication with fluoridating water system staff.

Overall Oral Health of Alabama's Children, 2010-2011

Alabama Dental Societies by District



Oral health status of Alabama's kindergarten and third grade children stratified by dental district

GOAL 4: *Data and Surveillance*

DENTAL DISTRICT	# SCREENED	% WITH DECAY EXPERIENCE	% WITH UNTREATED DECAY	% NEEDING TREATMENT	% NEEDING URGENT TREATMENT
1	1,086	47.8	(29%) 23.4	23.9	7.5
2	944	55.9	(22%) 20.8	21.4	5.7
3	768	59.8	(16%) 24.2	23.8	6.1
4	87	43.3	(26%) 20.0	17.7	0.0
5	1,409	55.3	(30%) 21.6	22.6	6.9
6	791	51.2	(27%) 25.7	25.9	7.9
7	1,519	46.7	(36%) 14.6	14.0	1.4
8	1,597	47.6	(27%) 19.7	19.3	4.0
9	856	38.8	(24%) 17.2	17.0	7.5

Prevalence of dental sealants among Alabama's third grade children stratified by dental district

DENTAL DISTRICT	3RD GRADERS SCREENED	% WITH DENTAL SEALANTS
1	514	26.9
2	451	33.7
3	346	35.7
4	48	25.9
5	654	24.6
6	400	17.7
7	719	35.9
8	701	30.2
9	271	25.5

Data Obtained from Alabama Basic Screening Survey (BSS) 2010 - 2012

Table 1: Demographic characteristics of children surveyed compared to participating schools, schools in the original sample and schools in the sampling frame (based on 2010-2011 enrollment data & children surveyed)

	NUMBER OF SCHOOLS	NUMBER IN KINDER.	NUMBER IN 3RD GRADE	PERCENT ON FRL[1]	PERCENT WHITE	PERCENT BLACK
All Schools in Sampling Frame	698	57,199	56,361	60%	59%	32%
Schools in Original Sample[2]	63	5,886	4,863	58%	59%	34%
Participating Schools[3]	63	5,597	4,950	60%	60%	32%
Children Screened[4]	NA	4,953	4,104	NA	58%	32%

[1] Free or reduced price school lunch program (FRL)

[2] Sampling was based on 3rd grade enrollment. Of the 63 schools originally selected, 6 did not have kindergarten. The kindergarten "feeder" schools for these 6 schools were added to the sample for a total of 69 schools from 63 sampling intervals.

[3] A total of 63 schools with third grade plus 5 kindergarten feeder schools participated for a total of 68 schools. Data is available for all 63 sampling intervals.

[4] One child in kindergarten had missing data for all of the oral health indicators.

NA=Not Available

NOTE: The participating schools are representative of the state in terms of socioeconomic status and race. The children screened are representative of the state in terms of race.

Unless otherwise indicated, all estimates presented are adjusted for the complex cluster sampling design and non-response.

Table 2: Race/ethnicity, gender and age of participating children by grade

DEMOGRAPHIC CHARACTERISTIC	KINDERGARTEN (n=4,953)	THIRD GRADE (n=4,104)	TOTAL (n=9,057)
RACE/ETHNICITY (% OF CHILDREN)			
White	57.7%	56.3%	57.0%
Black/African American	31.1%	34.2%	32.5%
Hispanic/Latino	6.1%	5.2%	5.7%
Asian	1.9%	1.1%	1.5%
American Indian/Alaska Native	0.0%	0.1%	0.1%
Native Hawaiian/Pacific Islander	0.0%	0.1%	0.1%
Multi-racial	1.8%	1.4%	1.6%
Missing/Unknown	1.4%	1.6%	1.5%
GENDER (% OF CHILDREN)			
Male	51.4%	50.5%	51.0%
Female	48.4%	49.2%	48.7%
Missing/Unknown	0.3%	0.3%	0.3%
AGE (% OF CHILDREN)			
3 years	0.0%	0.0%	0.0%
4 years	0.0%	0.0%	0.0%
5 years	51.8%	0.1%	28.4%
6 years	44.5%	0.1%	24.4%
7 years	1.3%	0.0%	0.7%
8 years	0.1%	46.8%	21.2%
9 years	0.3%	46.7%	21.3%
10 years	0.0%	4.5%	2.1%
Missing/Unknown	2.0%	1.7%	1.9%

Table 3: Number of children participating in each of Alabama's dental districts by grade

DENTAL DISTRICT	KINDERGARTEN (n=4,953)	THIRD GRADE (n=4,104)	TOTAL (n=9,057)
1	572	514	1,086
2	493	451	944
3	422	346	768
4	39	48	87
5	755	654	1,409
6	391	400	791
7	800	719	1,519
8	896	701	1,597
9	585	271	856
TOTAL	4,953	4,104	9,057

Table 4: Oral health status of Alabama's kindergarten and third grade children (95% confidence interval)

ORAL HEALTH VARIABLE	KINDERGARTEN (n=4,953)		THIRD GRADE (n=4,104)		TOTAL (n=9,057)	
% with decay experience[1]	43.1		57.6		49.7	
95% confidence limits	38.7	47.5	54.2	61.0	45.9	53.6
% with untreated decay[2]	19.7		21.3		20.4	
95% confidence limits	16.8	22.5	18.8	23.8	18.0	22.8
% needing any dental treatment[3]	19.4		21.6		20.4	
95% confidence limits	16.3	22.5	18.8	24.4	17.7	23.1
% needing *urgent* dental treatment[4]	5.1		5.6		5.3	
95% confidence limits	3.7	6.6	4.1	7.1	4.0	6.7
% with dental sealants[5]	NA		29.0		NA	
95% confidence limits			25.7	32.4		

[1] Refers to having untreated decay or a dental filling, crown, or other type of restorative dental material. Also includes teeth that were extracted because of tooth decay.

[2] Describes dental cavities or tooth decay that have not received appropriate treatment.

[3] Needs dental treatment means that a child needs early or urgent dental care.

[4] Needs urgent dental treatment means that a child needs urgent dental care because of pain or infection.

[5] Describes plastic-like coatings applied to the chewing surfaces of permanent back teeth. The applied sealant resin bonds into the grooves of teeth to form a protective physical barrier.

NA = Not applicable. Because of permanent tooth eruption patterns, the sealant indicator is only appropriate for 3rd grade children.

Note: Information on decay experience was missing for 2 children. Information on untreated decay was missing for 2 children. Information on dental treatment needs was missing for 4 children and information on dental sealants was missing for 2 children in 3rd grade.

Table 5A: Oral health status of Alabama's **kindergarten** children stratified by race and ethnicity

ORAL HEALTH VARIABLE	WHITE (n=2,857)		BLACK/AFRICAN AMERICAN (n=1,541)		OTHER/UNKNOWN (n=555)	
% with decay experience	38.7		48.1		52.2	
95% confidence limits	33.8	43.7	43.4	52.7	43.8	60.6
% with untreated decay	18.5		21.2		21.3	
95% confidence limits	15.0	22.1	18.1	24.3	17.3	25.4
% needing dental treatment	17.9		21.1		22.2	
95% confidence limits	14.2	21.7	17.9	24.4	17.2	27.2
% needing *urgent* dental treatment	5.2		4.7		6.0	
95% confidence limits	3.6	6.7	3.0	6.5	2.1	9.9

Table 5B: Oral health status of Alabama's **third grade** children stratified by race and ethnicity

ORAL HEALTH VARIABLE	WHITE (n=2,310)		BLACK/ AFRICAN AMERICAN (n=1,402)		OTHER/UNKNOWN (n=392)	
% with decay experience	55.1		59.8		65.5	
95% confidence limits	49.9	60.2	56.2	63.4	59.5	71.5
% with untreated decay	20.2		22.6		22.8	
95% confidence limits	17.4	23.0	19.1	26.1	17.7	27.9
% needing dental treatment	20.0		23.6		24.3	
95% confidence limits	16.8	23.1	20.2	27.1	17.6	31.1
% needing *urgent* dental treatment	4.5		6.8		7.8	
95% confidence limits	3.0	6.1	4.7	8.9	2.6	12.9
% with dental sealants	31.0		25.5		29.0	
95% confidence limits	26.5	35.5	21.5	29.6	22.8	35.3

Table 5C: Oral health status of Alabama's **kindergarten & third grade** children stratified by race and ethnicity

ORAL HEALTH VARIABLE	WHITE (n=5,167)		BLACK/AFRICAN AMERICAN (n=2,943)		OTHER/UNKNOWN (n=947)	
% with decay experience	46.1		53.7		57.6	
95% confidence limits	41.3	51.0	50.4	56.9	50.9	64.3
% with untreated decay	19.3		21.9		21.9	
95% confidence limits	16.4	22.2	19.3	24.5	18.2	25.6
% needing dental treatment	18.9		22.3		23.1	
95% confidence limits	15.8	21.9	19.5	25.1	18.0	28.1
% needing *urgent* dental treatment	4.9		5.7		6.7	
95% confidence limits	3.5	6.2	4.0	7.5	2.5	10.9

Table 6A: Oral health status of Alabama's **kindergarten** children stratified by school's FRL level

ORAL HEALTH VARIABLE	"HIGHER INCOME" < 25% FRL (n=199)		25-49% FRL (n=1,651)		50-74% FRL (n=1,997)		"LOWER INCOME" > 75% FRL (n=1,106)	
% with decay experience	24.2		34.1		47.5		50.7	
95% confidence limits	21.5	26.9	26.1	42.0	43.8	51.2	43.9	57.5
% with untreated decay	10.3		13.9		22.8		23.5	
95% confidence limits	8.3	12.3	8.8	19.1	19.7	25.9	20.8	26.1
% needing dental treatment	10.6		13.0		22.3		24.2	
95% confidence limits	9.0	12.1	7.8	18.2	18.6	25.9	21.1	27.3
% needing *urgent* treatment	0.6		2.7		6.1		7.3	
95% confidence limits	0.0	1.7	1.3	4.1	4.1	8.1	4.2	10.4

Table 6B: Oral health status of Alabama's **third grade** children stratified by school's FRL level

ORAL HEALTH VARIABLE	"HIGHER INCOME" < 25% FRL (N=189)		25-49% FRL (N=1,238)		50-74% FRL (N=1,728)		"LOWER INCOME" > 75% FRL (N=949)	
% with decay experience	33.9		49.6		63.4		62.7	
95% confidence limits	18.7	49.2	45.8	53.4	60.2	66.7	57.2	68.1
% with untreated decay	9.1		16.9		24.0		24.5	
95% confidence limits	1.5	16.8	13.8	19.9	20.6	27.4	19.9	29.1
% needing dental treatment	8.3		17.1		23.2		26.8	
95% confidence limits	0.0	16.9	13.9	20.2	19.2	27.1	21.4	32.1
% needing *urgent* treatment	1.9		2.8		5.3		9.5	
95% confidence limits	0.0	5.2	1.7	3.9	2.9	7.7	6.0	13.1
% with dental sealants	34.6		29.6		30.9		24.6	
95% confidence limits	33.9	35.3	22.9	36.3	24.5	37.4	19.0	30.3

Table 6C: Oral health status of Alabama's **kindergarten and third grade** children stratified by school's FRL level

ORAL HEALTH VARIABLE	"HIGHER INCOME" < 25% FRL (N=388)		25-49% FRL (N=2,889)		50-74% FRL (N=3,725)		"LOWER INCOME" > 75% FRL (N=2,055)	
% with decay experience	28.9		40.9		54.9		56.2	
95% confidence limits	19.7	38.1	34.3	47.5	51.8	58.0	50.4	61.9
% with untreated decay	9.7		15.2		23.4		23.9	
95% confidence limits	6.4	13.1	11.1	19.4	20.6	26.1	21.1	26.8
% needing dental treatment	9.5		14.8		22.7		25.4	
95% confidence limits	5.9	13.1	10.5	19.0	19.4	26.0	21.9	28.9
% needing *urgent* treatment	1.2		2.7		5.8		8.3	
95% confidence limits	0.0	3.5	1.6	3.9	4.0	7.5	5.2	11.5

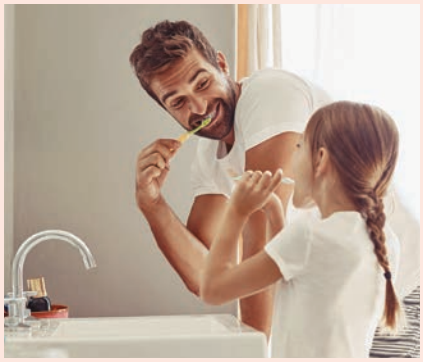


Table 8: Oral health status of Alabama's **kindergarten and third grade** children stratified by school (unadjusted)

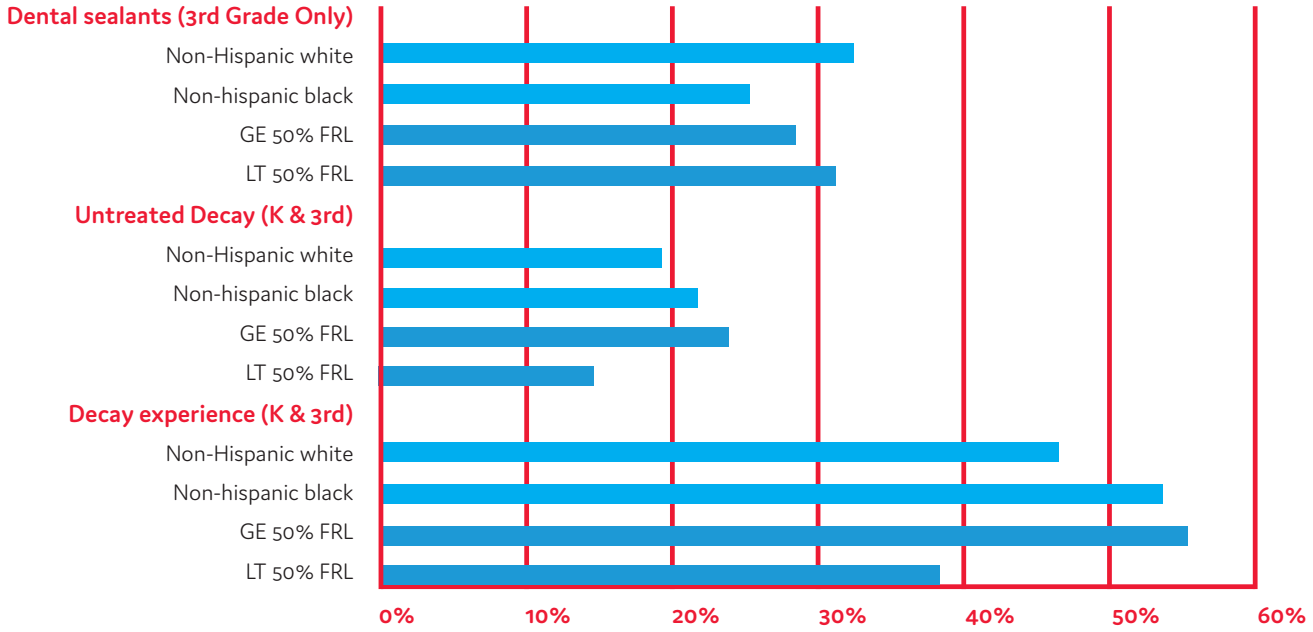
SCHOOL NAME	COUNTY	CITY	# KINDER SCREENED	# THIRD SCREENED	% WITH DECAY EXPERI-ENCE	% WITH UNTREAT-ED DECAY	% WITH SEALANTS 3RD ONLY
J Larry Newton	Baldwin	Fairhope	52	74	53.2%	27.0%	44.6%
Robertsdale Elementary	Baldwin	Robertsdale	133	77	45.9%	18.7%	41.6%
Ohatchee Elementary	Calhoun	Ohatchee	65	62	64.6%	27.6%	43.5%
Coldwater Elementary	Calhoun	Oxford	71	62	69.2%	42.1%	27.4%
Oxford Elementary	Calhoun	Oxford	0	123	71.5%	39.8%	13.1%
W. O. Lance Elementary	Chambers	Lanett	70	53	60.2%	23.6%	3.8%
Maplesville High	Chilton	Maplesville	23	22	57.8%	20.0%	54.5%
Lyeffion Junior High	Conecuh	Evergreen	21	20	51.2%	22.0%	20.0%
Luverne High	Crenshaw	Luverne	61	54	55.7%	17.4%	18.5%
Cullman City Primary	Cullman	Cullman	213	0	39.9%	5.6%	NA
East Elementary	Cullman	Cullman	0	96	51.0%	8.3%	58.3%
Good Hope Elementary	Cullman	Cullman	0	80	71.3%	32.5%	46.3%
Good Hope Primary	Cullman	Cullman	89	0	43.8%	30.3%	NA
Harmony	Cullman	Logan	24	25	75.5%	40.8%	32.0%
Clark Elementary	Dallas	Selma	63	53	66.4%	20.7%	35.8%
Ruhuma Junior High	Dekalb	Ft Payne	22	20	52.4%	7.1%	40.0%
Pollard-Mccall Junior High	Escambia	Brewton	18	28	32.6%	17.4%	32.1%
West End Elementary	Etowah	Altoona	59	47	71.7%	22.6%	34.0%
Whitesboro Elementary	Etowah	Boaz	41	36	39.0%	14.3%	5.6%
W. E. Striplin Elementary	Etowah	Gadsden	56	46	54.9%	17.6%	10.9%
John S Jones Elementary	Etowah	Rainbow City	117	101	44.5%	16.1%	8.9%
Tharptown Elementary	Franklin	Russellville	57	43	69.0%	31.0%	34.9%
Mulkey Elementary	Geneva	Geneva	115	76	62.6%	24.2%	52.6%
Eutaw Primary	Greene	Eutaw	48	54	40.2%	22.5%	3.7%
Greensboro Elementary	Hale	Greensboro	78	64	62.0%	41.5%	14.1%
Headland Elementary	Henry	Headland	99	104	59.6%	25.6%	49.0%
Girard Elementary	Houston	Dothan	63	46	61.5%	25.7%	28.3%
Adamsville Elementary	Jefferson	Adamsville	59	54	51.3%	22.1%	38.9%
Robinson Elementary	Jefferson	Birmingham	63	66	62.0%	10.1%	39.4%
Wenonah K-8	Jefferson	Birmingham	57	47	65.4%	18.3%	46.8%
Leeds Elementary	Jefferson	Leeds	141	103	47.5%	17.2%	23.3%
Pleasant Grove Elementary	Jefferson	Pleasant Grove	101	116	44.2%	11.1%	34.5%
Vestavia Hills Elementary	Jefferson	Vestavia Hills	68	55	21.1%	8.1%	34.5%
Corner	Jefferson	Warrior	55	49	54.8%	16.3%	40.8%
Warrior Elementary	Jefferson	Warrior	41	33	54.1%	12.2%	33.3%
South Lamar	Lamar	Millport	34	37	53.5%	18.3%	32.4%
Vernon Elementary	Lamar	Vernon	84	70	59.1%	28.6%	7.1%
Auburn Early Education Cntr	Lee	Auburn	386	0	17.6%	4.7%	NA
Wrights Mill Road Elementary	Lee	Auburn	1	84	33.3%	4.8%	21.7%
Cedar Hill Elementary	Limestone	Ardmore	81	59	49.3%	19.3%	15.3%
George Washington Carver	Macon	Tuskegee	118	99	53.9%	24.9%	32.3%
Weatherly Heights Elementary	Madison	Huntsville	77	62	41.0%	30.2%	25.8%
West Mastin Lake Elementary	Madison	Huntsville	42	32	47.3%	14.9%	18.8%
Williams Elementary	Madison	Huntsville	67	68	34.8%	11.9%	30.9%
West Madison Elementary	Madison	Madison	40	48	38.6%	14.8%	35.4%
Boaz Elementary	Marshall	Boaz	169	0	45.0%	20.7%	NA
Corley Elementary	Marshall	Boaz	0	157	73.2%	22.9%	43.3%
Anna F Booth Elementary	Mobile	Irvington	51	25	25.0%	25.0%	0.0%
Elsie Collier Elementary	Mobile	Mobile	106	132	42.9%	16.4%	22.7%
Spencer Elementary	Mobile	Mobile	49	42	47.3%	26.4%	35.7%
Grant Elementary	Mobile	Prichard	61	55	58.6%	20.7%	18.2%
J E Turner Elementary	Mobile	Wilmer	79	66	46.2%	20.7%	18.2%
Catoma Elementary	Montgomery	Montgomery	43	31	66.2%	28.4%	29.0%
Fitzpatrick Elementary	Montgomery	Montgomery	94	106	58.5%	26.0%	25.5%
Forest Avenue Elementary	Montgomery	Montgomery	91	86	32.8%	7.3%	33.7%
Falkville Elementary	Morgan	Falkville	41	53	52.1%	21.3%	35.8%
Fe Burleson Elementary	Morgan	Hartselle	60	58	33.1%	11.0%	8.6%
Laceys Spring Elementary	Morgan	Laceys Spring	35	20	45.5%	23.6%	25.0%
Troy Elementary	Pike	Troy	145	120	54.7%	21.5%	14.2%
Mount Olive Elementary	Russell	Phenix City	78	88	49.4%	31.9%	34.5%
Oliver Elementary	Russell	Phenix City	50	47	54.6%	26.8%	38.3%
Creek View Elementary	Shelby	Maylene	215	196	44.0%	17.5%	34.7%
Kinterbish Junior High	Sumter	Cuba	13	23	44.4%	25.0%	13.0%
Indian Valley Elementary	Talladega	Sylacauga	155	0	38.7%	12.3%	NA
Cordova Elementary	Walker	Cordova	66	73	51.8%	24.5%	9.6%
Memorial Park Elementary	Walker	Jasper	68	79	37.4%	21.8%	32.9%
Mcintosh Elementary	Washington	Mcintosh	41	43	67.9%	32.1%	32.6%
Double Springs Elementary	Winston	Double Springs	70	57	56.7%	22.8%	21.1%

Alabama Department of Public Health Data Brief • February 2013

Oral Health Disparities

Influential sociodemographic indicators for oral health disparities in the United States include poverty status and race and ethnicity. In Alabama, children that attend a school where 50% or more of the children are eligible for free or reduced price lunch program have a significantly higher prevalence of decay experience and untreated decay compared to children attending schools where less than 50% of children are eligible. There was no difference in the prevalence of decay experience or untreated decay among racial/ethnic groups. There was no in the prevalence of dental sealants in third grade children among racial/ethnic groups or by poverty status.

Figure 3. Prevalence of decay experience and untreated decay among Alabama's kindergarten and third grade children and dental sealants among Alabama's third grade children by race/ethnicity and percent of children eligible for the free/reduce price lunch program (FRL), 2011-2013



Data table

Prevalence of decay experience and untreated tooth decay in the primary and permanent teeth of Alabama's kindergarten and 3rd grade children and prevalence of dental sealants on permanent molars among Alabama's third grade children by selected characteristics, 2011-2013

Characteristic	Decay Experience			Untreated Decay			Dental Sealants 3rd Grade Only		
	Percent	Lower CL	Upper CL	Percent	Lower CL	Upper CL	Percent	Lower CL	Upper CL
GRADE									
Kindergarten	43.1	38.7	47.5	19.7	16.8	22.5	NA	NA	NA
3rd Grade	57.6	54.2	61.0	21.3	18.8	23.8	29.0	25.7	32.4
Kindergarten & 3rd Grade	49.7	45.9	53.6	20.4	18.0	22.8	NA	NA	NA
RACE/ETHNICITY									
White non-hispanic	46.1	41.3	51.0	19.3	16.4	22.2	31.0	26.5	35.5
African American/Black	53.7	50.4	56.9	21.9	19.3	24.5	25.5	21.5	29.6
PERCENT ELIGIBLE FOR FRL									
Less than 50%	39.0	32.8	45.1	14.3	10.8	17.9	30.5	24.9	36.1
More than 50%	55.4	52.4	58.8	23.6	21.6	25.6	28.3	24.0	32.6

Lower CL: Lower 95% confidence limit **Upper CL: Upper 95% confidence limit** **NA: Not applicable**

Cleft Lip and Palate*

ICD -10	Diagnosis	Active Clients
Q35.3	Cleft Soft Palate	9
Q35.5	Cleft Hard Palate with Cleft Soft Palate	112
Q35.7	Cleft Uvula	4
Q35.9	Cleft palate, unspecified	93
Q35.0 - Q35.9	Total Range of CLP diagnosis enrolled with CRS this FY	218

Children's Rehabilitation Service of Alabama (CRS)
** Only reflects children enrolled with CRS receiving services from these diagnoses from CRS.*

Alabama Department of Senior Services
Geriatric Outreach Rotation

UAB School of Dentistry
Pilot Program
Summary Report

The program:

The UAB School of Dentistry (SOD) Geriatric Outreach Rotation (GOR), supported by the Alabama Department of Senior Services (ADSS), was tasked to provide oral health education, oral examinations, oral cancer and blood pressure screenings to senior citizens in counties surrounding the Birmingham metropolitan area. The sites were chosen and support personnel provided by the Middle Alabama Area Agency on Aging (m4a).

Demographic and other information was collected by a written survey completed by each participating person. The dental and medical information was collected by examination and written records of each person. Third and fourth year dental students from the UAB SOD, supervised by a UAB faculty member, performed the oral examinations and provided one-on-one educational information.

The UAB SOD faculty member provided a short educational program at each rotation site that was linked to an oral health knowledge quiz. The participating seniors took a fifteen question Dental Knowledge quiz prior to hearing the educational program and their individual examinations. After their oral examinations, the participants were asked to complete a post-test to be able to compare their answers and see if their oral health knowledge improved. Each participant was given written information about the importance of oral health to his or her overall health, as well as, a brochure specific to dental health in addition to the oral presentation.

The only deviation from this format was at the home visits where the oral presentation was not given, however, the written educational materials were distributed and explained to the participant.

Older adult oral health – from UAB School of Dentistry Survey 2017/2018 – among Jefferson county residents of senior centers selected by Middle Alabama Area Agency on Aging, the survey found that 33% of residents had an upper denture, 25.4% had a lower denture, 46% had untreated decay, and 37% needed periodontal care.

Alabama Department of Senior Services Screening 2017-2018

	HAS UPPER DENTURE	HAS LOWER DENTURE	UNTREATED DECAY	NEEDS PERIO CARE
No	62.04%	70.40%	36.11%	48.14%
Yes	33.80%	25.46%	46.76%	37.04%
N/A	4.17%	4.17%	17.13%	14.81%
Total	100%	100%	100%	100%

Behavioral Risk Factor Surveillance System (BRFSS) 2016

Oral Health in Alabama		
Percent of Adults who have visited a dentist, dental hygienist, or dental clinic within the past year	**Upper Estimate**	**63.9**
	Estimate	**62.3**
	Lower Estimate	**60.7**
Percent of Adults aged 18+ who have had permanent teeth extracted	**Upper Estimate**	**49.6**
	Estimate	**48.0**
	Lower Estimate	**46.4**
Percent of Adults aged 65+ who have had all natural teeth extracted	**Upper Estimate**	**20.6**
	Estimate	**18.4**
	Lower Estimate	**16.2**

BRFSS

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly. It was established in 1984 by the Centers for Disease Control and Prevention (CDC). BRFSS is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury.

For Alabama, the BRFSS is the only available source of timely, accurate data on health-related behaviors. BRFSS provides state-specific information about issues such as asthma, diabetes, health care access, alcohol use, hypertension, obesity, cancer screening, nutrition and physical activity, tobacco use, and more. Federal, state, and local health officials and researchers use this information to track health risks, identify emerging problems, prevent disease, and improve treatment.

The CDC developed a standard core questionnaire for states to use so data could be compared against other states. Although the BRFSS was designed to collect state-level data, Alabama began to stratify their sample in 2007 which allows for estimates of prevalence for health areas. Data is updated every spring and is available through 2010.

Alabama data is stratified on the 11 public health areas, as designated by ADPH. The basic philosophy is to collect data on actual behaviors, rather than on attitudes or knowledge, that would be especially useful for planning, initiating, supporting, and evaluating health promotion and disease prevention programs.

GOAL 5:
Prevention

GOAL 5: *Prevention*

By September 30, 2023, establish and implement pre-emptive measures intended to alleviate the circumstances associated with compromised oral health.

Objective 5.1: At local levels, maintain/build relationships with community-based organizations to support the implementation of evidence based oral health initiatives that prevent dental disease (e.g, community water fluoridation, dental sealants, fluoride varnish, oral/systemic links to general health).

5.1.1 Provide visits (ADPH and partners) to fluoridated and non-fluoridated water systems statewide to promote fluoridation and ensure monitored data is submitted to CDC.

5.1.2 Collaborate with the Alabama Department of Environmental Management (ADEM), the Alabama Rural Water Association, the Alabama Rural Health Association and other agencies/organizations to promote the benefits of community water fluoridation.

5.1.3 Develop and maintain a toolkit of resources to aid communities in supporting community water fluoridation.

Objective 5.2: Develop and implement school-based oral health prevention programs.

5.2.1 Provide school-based dental sealants programs in select school systems statewide.

5.2.2 Provide fluoride varnish applications for at-risk young children (e.g., Head Start, Early Head Start, Pre K programs).

Objective 5.3: Apply newly approved products/techniques to prevent and/or arrest dental decay.

5.3.1 Promote the use of Silver Diamine Fluoride (SDF) in select, underserved communities.

Objective 5.4: Educate medical providers in preventive benefits of fluoride varnishes in underserved areas.

5.4.1 Encourage the placement of fluoride varnishes by pediatricians and other certified non-dental professionals for patients up to 36 months through the Alabama Medicaid 1st Look program.

Objective 5.5: Promote preventive measures to dentists, medical providers, parents, and children related to contracting HPV.

5.5.1 Recommend HPV vaccine at age 11-12 years for boys and girls, although a range from 9-26 years of age is acceptable.

5.5.2 Design and disseminate pamphlets to educate schools, parents, children, dentists, and other medical providers in ways to prevent contracting HPV thus decreasing risk of oropharyngeal cancer.

Prevention

In the words of Thomas Jefferson, "An ounce of prevention is worth a pound of cure". No truer words can be spoken when dealing with oral health. While the economic impact alone is staggering, many other benefits can be cited. Dental caries is one of the most prevalent of all chronic conditions. According to the Center for Disease Control and Prevention (CDC):

- 80% of people have had at least one cavity by the age of 34
- 40% of adults have experienced oral pain in the past year
- An average of > $113 billion dollars are spent annually on dental care
- $6 billion of productivity is lost each year due to dental-related work absence

Total US dental expenditures for children 0-21 years in 2012 exceeded $25 billion dollars.

830,000 emergency room visits were due to preventable dental conditions.

Water fluoridation can yield an annual return on investment of between $5 and $32 for every $1 spent depending on community size.

Delivering sealants to high-risk children saves Medicaid $6 per tooth sealed over a 4-year period.

As stated earlier, the mouth is considered the gateway to the body and therefore affects overall health. Its maintenance is essential to speech, mastication, expression of emotions, and self-esteem just to name a few. Ingestion of some foods, as well as participation in high risk behaviors (smoking, use of smokeless tobacco, excessive alcohol consumption, etc.) can result in chronic diseases (heart disease, cancer, heart disease, etc.) that potentially reach far beyond the oral cavity. But by focusing on root causes rather than the symptoms after problems manifest, the aforementioned conditions and statistics, as well as many others, could be mitigated.

"For every dollar spent on preventive oral care, $8 to $50 is saved in restorative and emergency care"

- The Academy of General Dentistry, Health Insurance Underwriter, June 2004

Caries

The word caries is synonymous with dental decay or cavities. It refers to the condition resulting when specific bacteria cause breakdown of tooth enamel and underlying dentin. Almost totally preventable, it remains the most chronic disease of children and adolescents in the 6-11 and 12 -19 years age range.

The most recent assessment of Alabama children's oral health status was carried out by the Alabama Department of Public Health during the 2011-2012 and 2012-2013 school years. A total of 9,057 children in 68 public schools statewide were screened. Each of the sample schools had ≥20 children in the 3rd grade. As a result of the survey, comparisons could be drawn regarding prevalence of tooth decay in the primary and permanent dentition of Alabama's kindergarten and third grade children between 2011-2013 and a the previous one from 2005-2007. It also allowed for comparisons to 6-9 year old children in the general U.S. population and to the targets for Healthy People 2020.

Data from the Alabama Oral Health Survey, 2011-2013

- About half of Alabama's kindergarten and third grade children (50%) had a history of decay in their primary or permanent teeth, compared to 45% of 6-9 year old children in the general US population. The Healthy People HP 2020 for 6-9 year olds target is 49%.

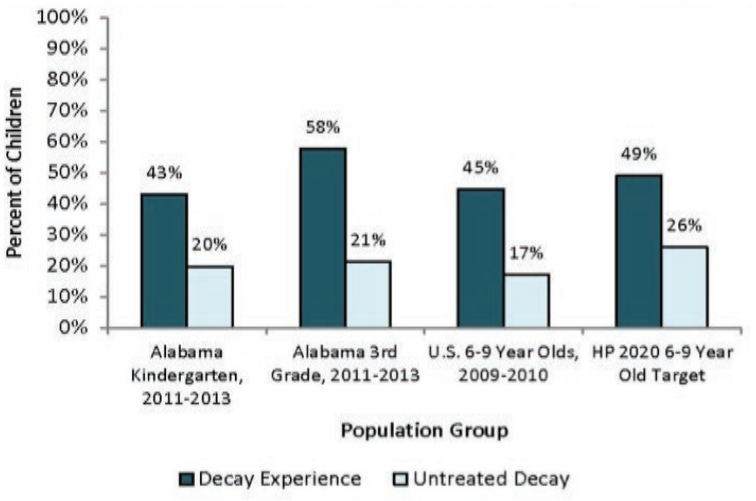
- About one-fifth of Alabama's kindergarten and third grade children (20%) had untreated decay. This compares to 17% of 6-9 year old children in the general US population and a HP 2020 target of 26%.

- More than one out of four (29%) third grade children in Alabama had at least one dental sealant on a permanent tooth; similar to the prevalence among the general US population and the HP 2020 target for 6-9 year olds (32% and 28% respectively).

- Some oral health dispairities still exist in Alabama with low-income children having the highest prevalence of decay experience and untreated decay.

Prevalence of decay experience and untreated decay.

Figure 1. Prevalence of decay experience and untreated tooth decay in the primary and permanent teeth of Alabama's kindergarten and third grade children compared to 6-9 year old children in the U.S. population and Healthy People 2020 targets



Sources: Alabama Oral Health Survey, 2011-2013
National Health and Nutrition Survey (NHANES), 2009-2010

Fluoride and Community Water Fluoridation

The discovery of fluoride's applications in dentistry trace back to the early 1900s when Frederick McKay, a dentist, noticed that many Colorado natives (~90% in one town) had significant brown staining on their teeth.

Often referred to as a drug by the misinformed, fluoride is actually a mineral that is found naturally occurring in phosphate rocks. It is released into the soil which accounts for the natural levels of fluoride found in ground water. The amount of naturally occurring fluoride varies extensively throughout the world. The discovery of the benefits of its effect upon the prevention of decay date to 1909. It took until 1945, however, for the first city to intentionally introduce fluoride into its drinking water. The City Commission of Grand Rapids, Michigan was the first to allow fluoride to be added to its public water supply. Research had shown that an amount of fluoride in drinking water up to 1.0 ppm significantly reduced the incidence of dental decay throughout the population without the unwanted and unsightly presence of fluorosis—a benign discoloration of the teeth which occurs at too high concentrations of fluoride. Eleven years after the introduction of fluoride, there was a staggering 60% reduction in the caries incidence of the children born after its addition.

Over the years, the Center for Disease Control and Prevention has continued its research to establish the optimal level of fluoride in a city's water supply. In 2012, the CDC issued its official recommendation for optimal fluoridation as 0.7 ppm.

"In fact, the economic analysis found that for larger communities of more than 20,000 people where it costs about 50 cents per person to fluoridate the water, every $1 invested in this preventive measure yields approximately $20 savings in dental treatment costs."

- Center for Disease Control and Prevention (CDC)

Ten Great Public Health Achievements - United States 1900-1999

- Vaccination
- Motor vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from coronary heart diseases and stroke
- Safer and healthier foods
- Healthier mothers and babies
- Family planning
- FLUORIDATION OF DRINKING WATER
- Recognition of tobacco use as a health hazard

Alabama Fluoridation Law

ENROLLED, An Act,

Relating to public drinking water systems; to require a public water system to notify the State Health Officer before initiating any permanent change in the fluoridation status of its water supply.

BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

Section 1. (a) A public water system, as defined in Section 22-23-31, Code of Alabama 1975, that proposes to initiate any permanent change in the fluoridation status of its water supply, including, but not limited to, discontinuing the fluoridation of the water supply or reducing the level of fluoride from an optimal level as defined by the Centers for Disease Control and Prevention (CDC), shall provide written notice to the State Health Officer no fewer than 90 days before initiating the change. Notice shall include the proposed date of the change, reasons for the change, and all communities affected by the change.

(b) A public water system that fails to meet the notification requirements of subsection (a) shall resume the fluoridation of its water supply to its previous level until proper notice is provided to the State Health Officer.

(c) The notification requirements of subsection (a) do not apply to a temporary discontinuance of fluoridation that is caused by equipment failure, maintenance, or replacement; temporary chemical supply shortages; placing water sources offline; or other similar unavoidable circumstances.

Section 2. This act shall become effective on the first day of the third month following its passage and approval by the Governor, or its otherwise becoming law.

President and Presiding Officer of the Senate

Speaker of the House of Representatives

SB180
Senate 01-FEB-18
I hereby certify that the within Act originated in and passed the Senate.

Patrick Harris,
Secretary.

House of Representatives
Passed: 22-MAR-18

By: Senator Bussman

APPROVED 4/6/18
TIME 2:53pm

GOVERNOR

Page 3

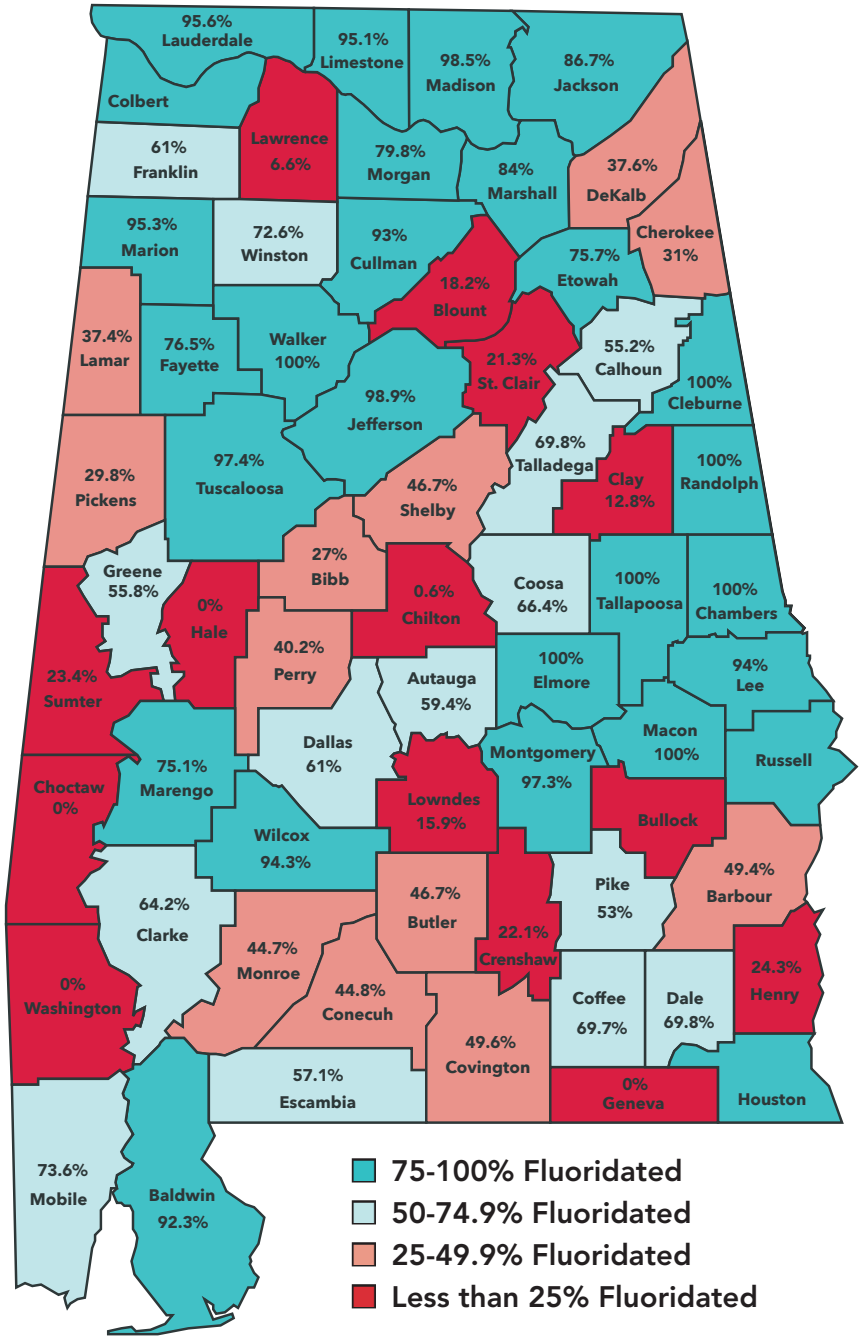
Alabama Secretary Of State
Act Num....: 2018-547
Bill Num...: S-180
Recv'd 04/06/18 03:50pmCW

HISTORY

On April 6, 2018, Alabama became only the fourth state (joining Tennessee, New York and Missouri) to enact a law regarding CWF. The law, signed by Governor Kay Ivey, requires a public water system to notify the State Health Officer no fewer than 90 days before initiating any changes in the fluoridation status of its water supply. While the law by no means prohibits the removal of CWF, the 90 day requirement provides sufficient time to notify the communities and educate those impacted by the impending decision.

Community Water Fluoridation

The target for Healthy People 2020 for the percent of the U.S. population to receive the benefits of community water fluoridation is unchanged from its 2010 goal of 79.6%. According to the CDC Water Fluoridation Reporting System (WFRS) as of December 31, 2014, Alabama ranked 23rd nationally with 78.6% touting the benefits of community water fluoridation.



"Community water fluoridation is the most cost-effective way to deliver fluoride to people of all ages, education levels, and income levels who live in a community"

Center for Disease Control and Prevention - Atlanta

Unfortunately, increased skepticism over the safety of fluoride being added to water supplies has led to a downward trend in the population coverage. Legislative guidelines are presently in the works so that educational opportunities for the residents as well as the water boards themselves will allow for decisions based on fact rather than hearsay (Objectives 3.3.4, 3.3.5, 3.3.6, 3.3.7).

Sealants

Dental sealants are a dental treatment intended to prevent tooth decay. Teeth have recesses on their biting surfaces; the back teeth have fissures and some front teeth have cingulum pits. It is these pits and fissures which are most vulnerable to tooth decay, partly because food sticks in them and they are hard-to-clean areas. Dental sealants are materials placed in these pits and fissures to fill them in, creating a smooth surface that is easy to clean. Dental sealants are mainly used in children who are at higher risk of tooth decay, and typically they are placed as soon as the adult molar teeth come through.

- Wikipedia

Surface of Molar
Before Sealant

Surface of Molar
Protected by Sealant

Since the early 1970's, children have benefited from the application of sealants. Completely painless to apply, "caries protection is 100% in pits and fissures that remain completely sealed. Complete retention rates after one year are 85% or better and after five years are at least 50%." According to the Alabama Oral Health Survey (2011-20130, only 29% of Alabama's third grade children had at least one dental sealant; compared to 32% of the general U.S. population aged 6-9 years (NHANES, 2009-2010). The Healthy People 2020 target for dental sealants in 6-9 year olds is 28%.

Fluoride Varnish

Form

Varnishes are available as sodium fluoride (2.26% [22,600 ppm] fluoride) or difluorsilane (0.1% [1,000 ppm] fluoride) preparations.

Use

High-concentration fluoride varnish is painted by dental or other health care professionals directly onto the teeth. Fluoride varnish is not intended to adhere permanently; this method holds a high concentration of fluoride in a small amount of material in close contact with the teeth for many hours. Varnishes must be reapplied at regular intervals with at least 2 applications per year required for effectiveness.

Availability

All fluoride varnish must be applied by a dentist or other health care provider.

Recommendations

No published evidence indicates that professionally applied fluoride varnish is a risk factor for dental fluorosis, even among children younger than 6 years of age. Proper application technique reduces the possibility that a patient will swallow varnish during its application and limits the total amount of fluoride swallowed as the varnish wears off the teeth over several hours.

Although it is not currently cleared for marketing by the Food and Drug Administration (FDA) as an anti-caries agent, fluoride varnish has been widely used for this purpose in Canada and Europe since the 1970s. Studies conducted in Canada and Europe have reported that fluoride varnish is as effective in preventing tooth decay as professionally applied fluoride gel.

-Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion

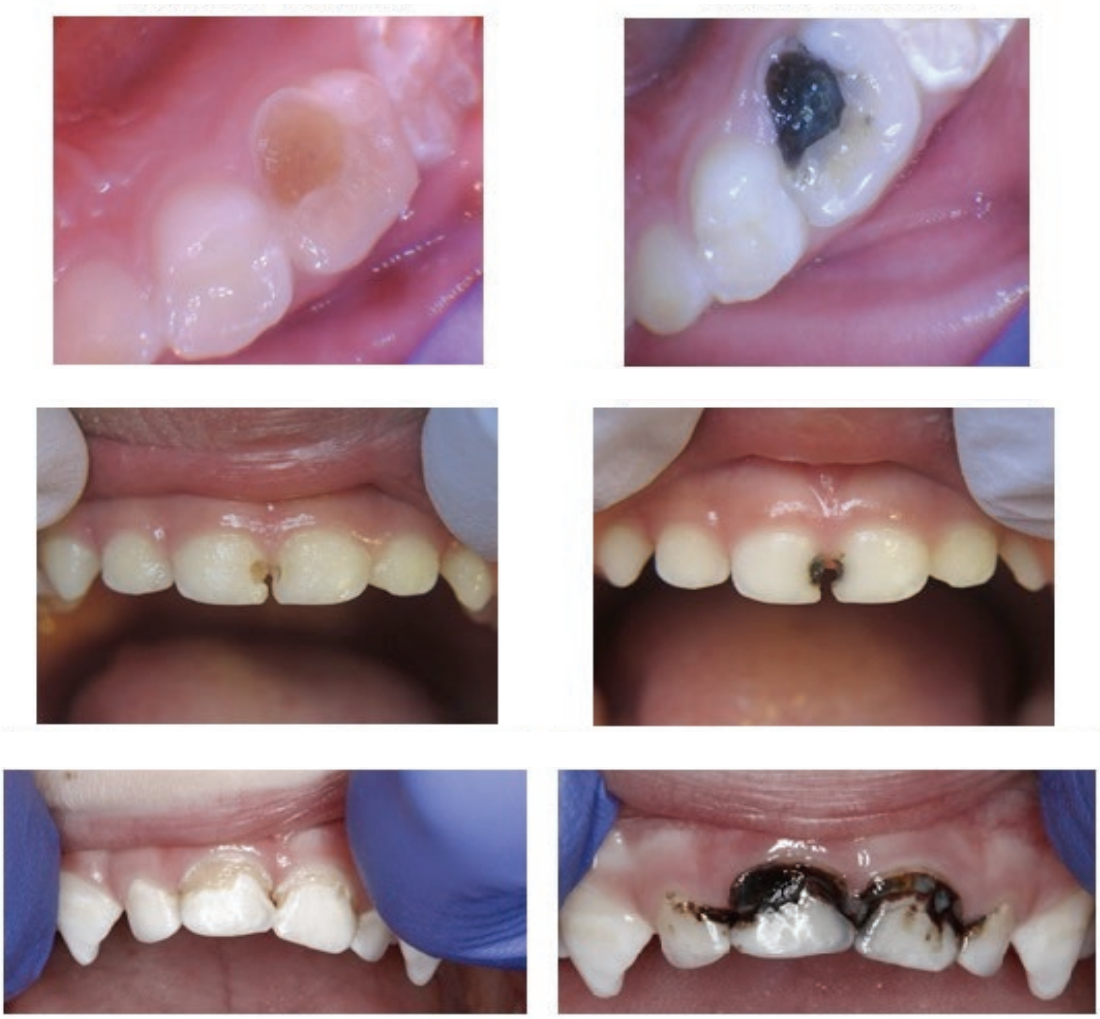
Silver Diamine Fluoride (SDF)

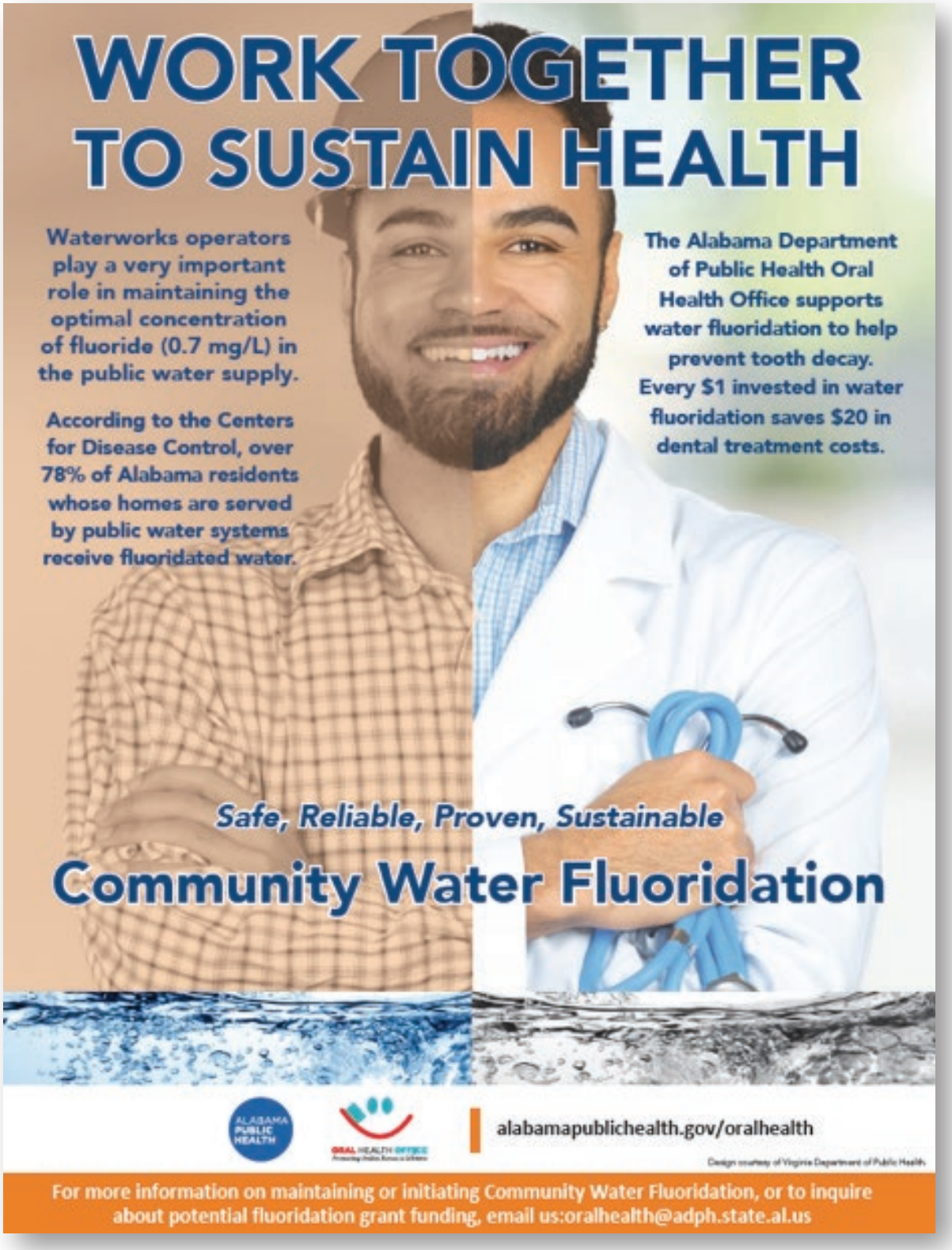
Relatively new to FDA approval (August 2014), SDF has been used extensively in areas outside the United States for many years. A colorless liquid containing silver particles and 38% (44,800 ppm) fluoride that at pH 10 is 25% silver, 8% ammonia, 5% fluoride, and 62% water. It is approved as a desensitizing agent but its real value is recognized as an off-label agent for caries arrest.

SDF can be used without local anesthetic painlessly in asymptomatic teeth for patients unable to access dental treatment or tolerate conventional dental care. Its application spans the age range from children to older adults. Applied at least once per year, it has been shown to arrest >65% of active decay. Additionally, it demonstrates caries prevention to adjacent teeth.

SDF's only true contraindication is silver allergy. Unfortunate side effects are permanent: staining (black) of carious lesions, temporary soft tissue discoloration, and occasional complaints of a metallic taste. Its cross-cutting application boundaries allow for easier access as dentists, hygienists, and pediatricians (for patients up to 36 months) can apply it. Alabama Medicaid approved reimbursement for SDF applications in 2019. Currently, Alabama is one of fifteen states that currently allow for reimbursement.

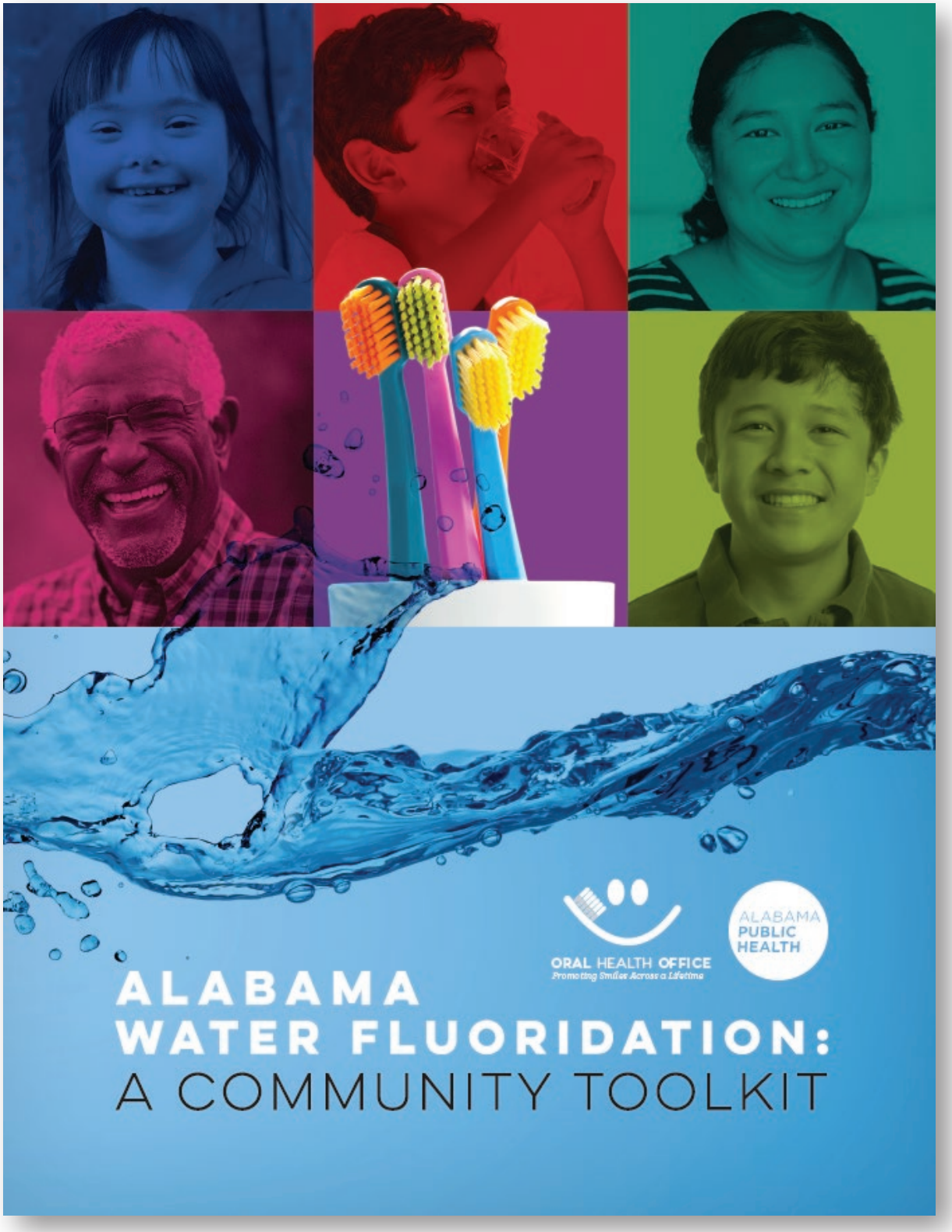
Before SDF Treatment | After SDF Treatment





Celebrating 75th Anniversary of Community Water Fluoridation in the United States

January 25, 1945-2020
Grand Rapids, Michigan



An educational toolkit developed by
Alabama Department of Public Health Oral Health Office

www.alabamapublichealth.gov/oralhealth

Alabama Department of Public Health

RSA Tower • Montgomery, Alabama

#ALSOHP

State Oral Health Plan

ALABAMA PUBLIC HEALTH

ORAL HEALTH OFFICE
Promoting Smiles Across a Lifetime

OHCA
ORAL HEALTH COALITION OF ALABAMA

CDC Oral Health Plan