ARKANSAS ORAL HEALTH DATA DECK

2024

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PURPOSE

The purpose of the Oral Health Data Deck is to provide a set of graphs and charts that tell the story of oral health practices and oral disease risk factors in Arkansas.

These charts and graphs can freely be copied for use in other presentations or reports.

What is Oral Health?

Oral health involves the proper function of tissues in the oral cavity like:

- Teeth
- Gums
- Hard and soft palate
- Lining of the mouth and throat
- Tongue
- Lips
- Salivary glands
- Chewing muscles
- Upper and lower jaw bones

What is Oral Disease?

Oral diseases develop when bacteria, viruses, and other influencing factors cause tissues of the oral cavity to stop functioning properly or break down.

Oral diseases can include tooth decay (cavities), gum disease (periodontal disease), and oral cancers.

Other conditions that can impact oral health include oro-facial birth defects and chronic diseases like diabetes.

Why is Oral Health Important?

Good oral health allows people to chew nutritious foods, form the sounds of speech, and smile at people around them.

Oral disease is caused by bacteria that can enter the bloodstream and complicate diseases in other places in the body. Preventing and treating oral disease can make the whole body healthier.

DATA SOURCES FOR THE 2024 DATA DECK

NATIONAL LEVEL DATA

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System is a standardized, random telephone health survey conducted by each of the 50 states, Washington, D.C., and three U.S. territories under the guidance of the Centers for Disease Control and Prevention (CDC). Arkansas BRFSS contracts with an outside agency to conduct the survey, using a Computer-Aided Telephone Interviewing System. Respondents are selected using a "Disproportionate Stratified Random Sampling" design using a two-stage process. First, a telephone number is randomly selected from listed and unlisted telephone numbers. Second, according to BRFSS protocol, when a residence is selected, a random household member (age 18 or older) is chosen to interview. The surveillance system consists of self-reported data, and oral health questions are asked every even year.

Youth Risk Behavior Surveillance System (YRBSS)

The CDC's Youth Risk Behavior Surveillance System is the only surveillance system designed to monitor a wide range of priority health risk behaviors – unintentional injuries and violence; tobacco, alcohol, and other drug use; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection; unhealthy dietary behaviors; physical inactivity; obesity; and asthma – among high school students. YRBSS uses a stratified random sample of schools and students at both the national and state levels. It is a paper-based classroom survey. The surveillance system consists of self-reported data, and oral health questions are asked every odd year

STATE LEVEL DATA

Arkansas Cancer Registry Query System

The Arkansas Cancer Registry Query System is a population-based registry with the goal of collecting timely and complete data on all cancer cases diagnosed in the state. The registry, located within the Center for Public Health Practice of the Arkansas Department of Health, is responsible for maintaining a statewide cancer incidence reporting system; monitoring data accuracy, reliability, and completeness through systematic quality assurance procedures; analyzing cancer incidence and mortality data; disseminating cancer information; and facilitating studies related to cancer prevention and control.

DATA SOURCES FOR THE 2024 DATA DECK

STATE LEVEL DATA, cont.

Child Core Set (Medicaid Children's Health Insurance Program)

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) included provisions to strengthen the quality of care provided to and health outcomes of children in Medicaid and the Children's Health Insurance Program (CHIP), leading to the establishment of the Child Core Set. The Child Core Set includes a range of children's quality measures encompassing both physical and mental health. The data for the Child Core Set are reported by a state's Medicaid program annually.

Pregnancy Risk Assessment Monitoring System (PRAMS)

The Pregnancy Risk Assessment Monitoring System is a surveillance project of the CDC and state health departments. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS provides data for state health officials to use to improve the health of mothers and infants. PRAMS allows CDC and the states to monitor changes in maternal and child health indicators (e.g., unintended pregnancy, prenatal care, breastfeeding, smoking, drinking, and infant health). PRAMS enhances information from birth certificates used to plan and review state maternal and infant health programs. The PRAMS sample is chosen from all women who had a live birth recently. Weighting methodology is applied for the findings to be representative of the state's entire population of women who have recently delivered a live-born infant. PRAMS not only provides state-specific data but also allows comparisons among participating states because the same data collection methods are used in all states.

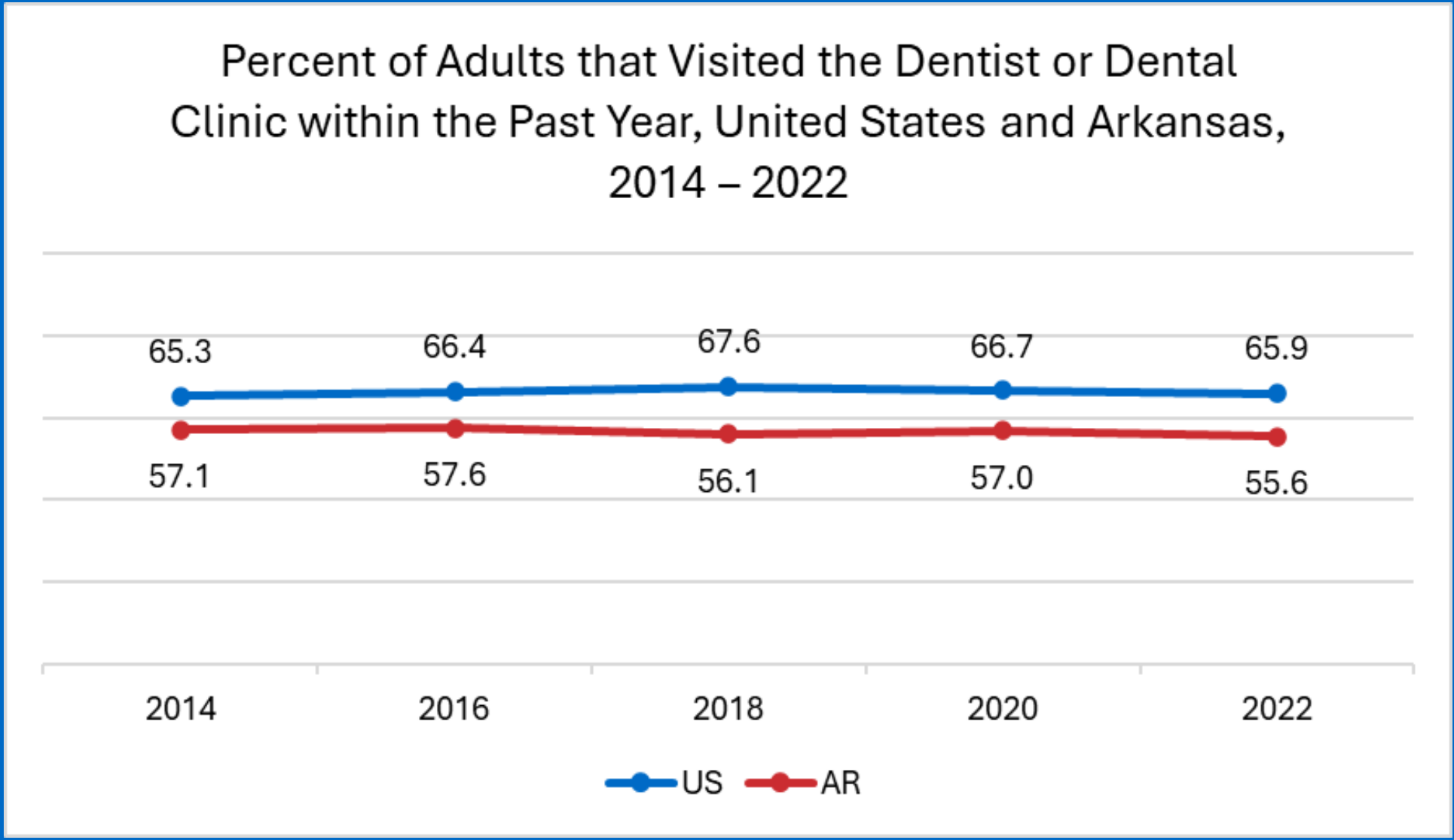
Dental Health Professionals in Arkansas

The Health Statistics Branch of the Arkansas Department of Health provides a variety of data concerning the health of Arkansans, including a Health Professions Manpower Statistics report. This report is based on information obtained by the Arkansas State Board of Dental Examiners (ASBDE) during the 2020 license renewal process.
Copies of practitioner responses to questions on license and permit renewal applications were provided to the Arkansas Department of Health (ADH) Health Statistics Branch by the ASBDE. Because the data were collected by several boards using questionnaires designed to meet the licensing requirements of the individual professions, a certain consistency of format and content - desirable for manpower measurement - is missing from the data. Various items of demographic data, such as ethnic origin and gender, are obtained by some, but not all, of the boards. Information relating to a practitioner's location- address, city, county, state, etc.- meets the licensing board's need to communicate with the practitioner by mail and may or may not identify the site(s) where health-related services are performed.

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

DENTAL VISITS

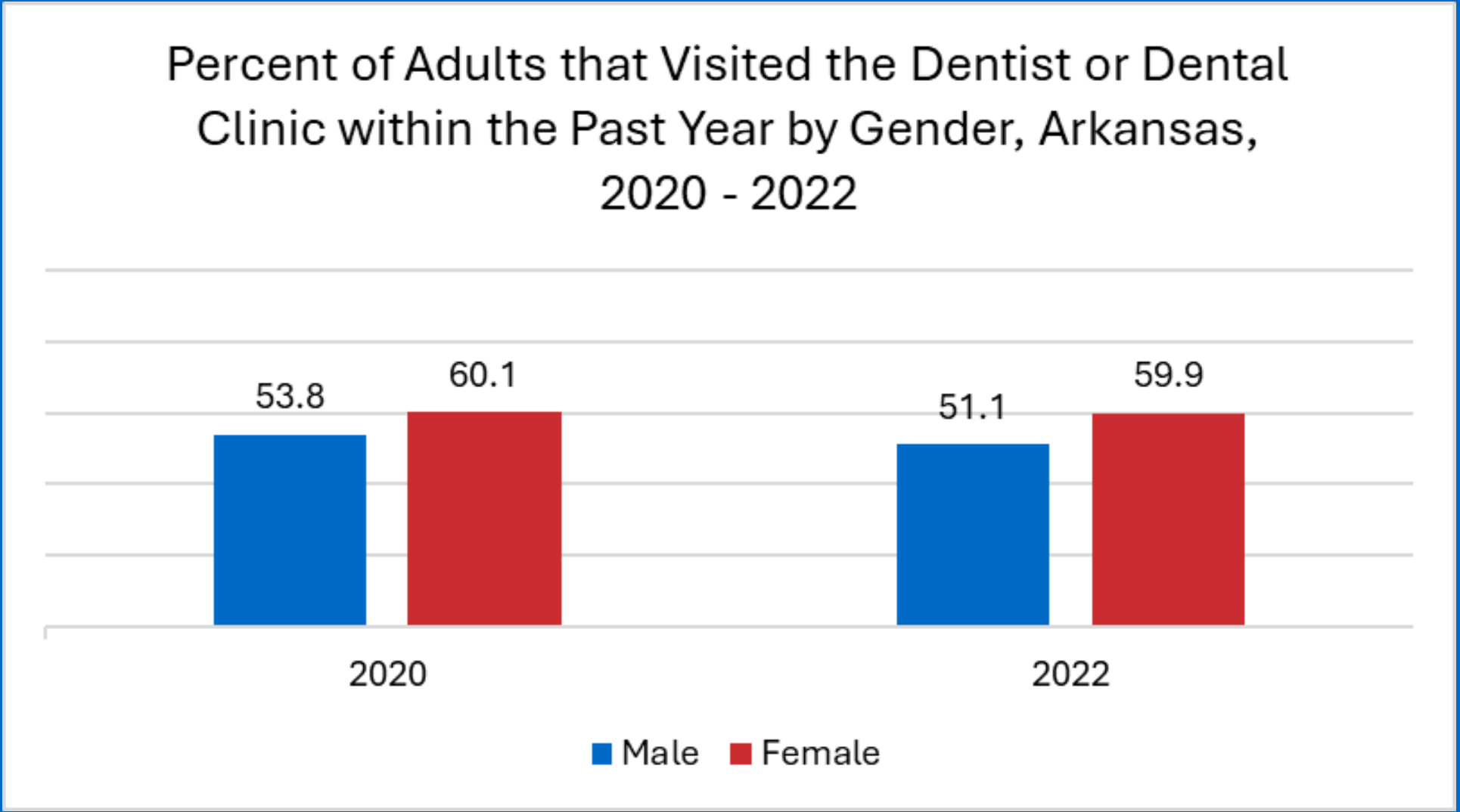
Regular dental visits are key to diagnosing, preventing, and treating oral diseases.



BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

DENTAL VISITS BY GENDER & AGE

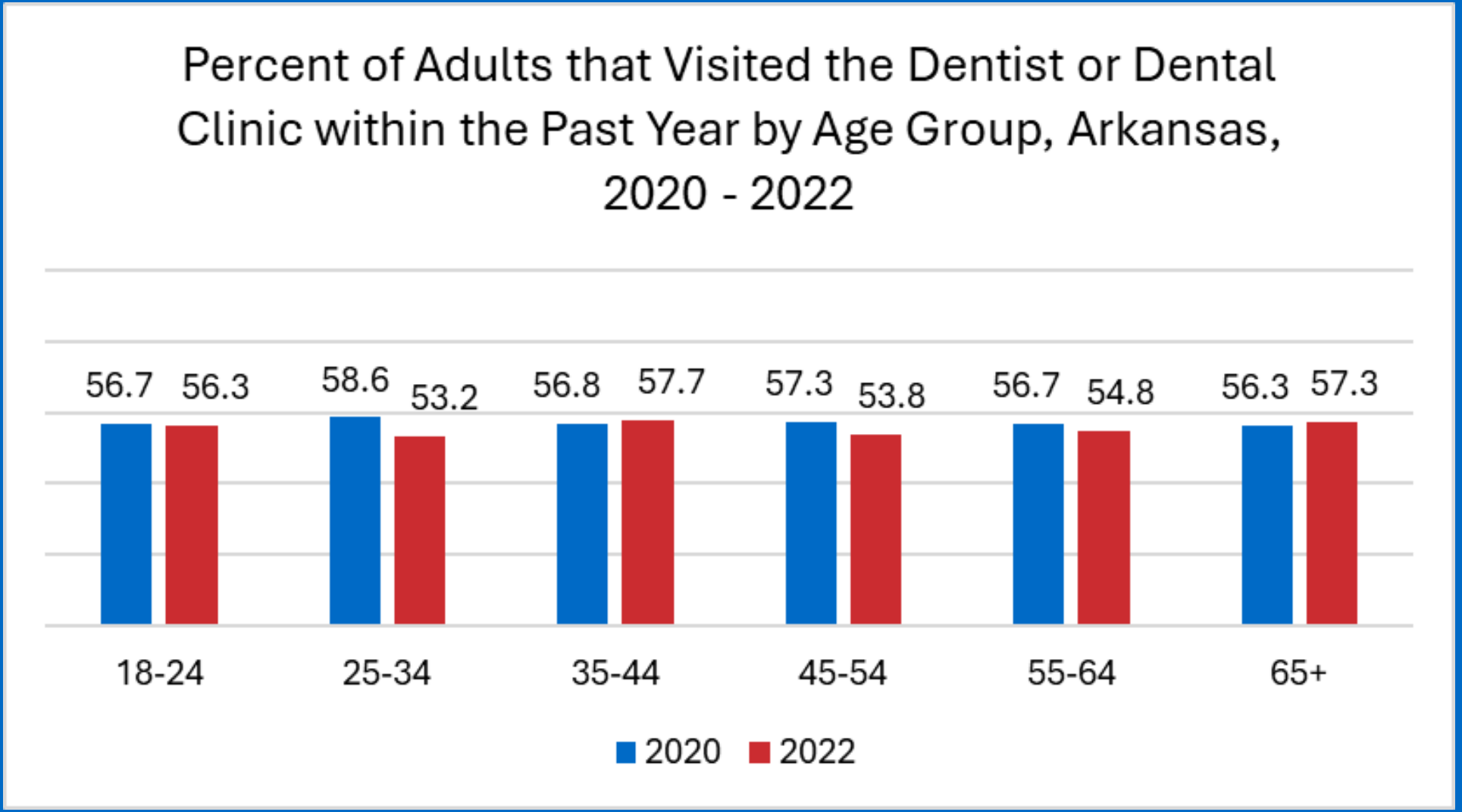
Regular dental visits are important for both women and men as each may experience different oral disease risk factors.



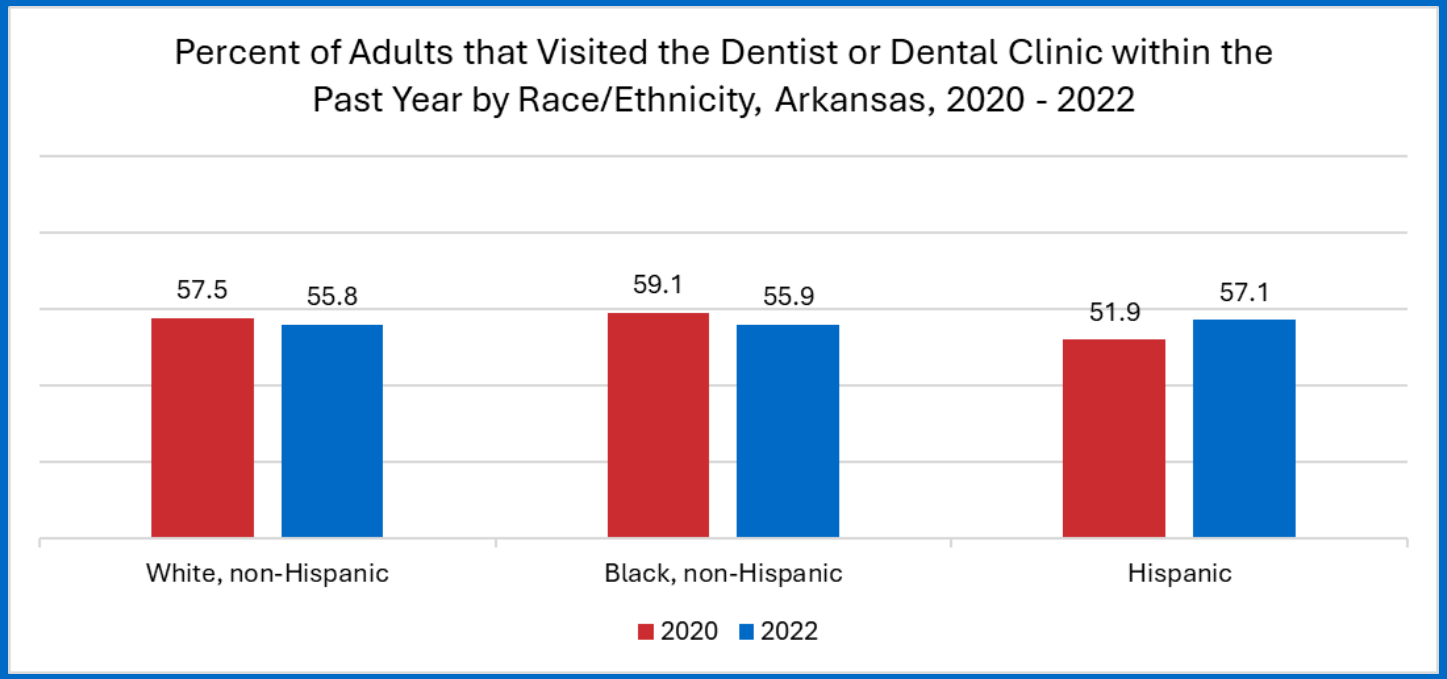
BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

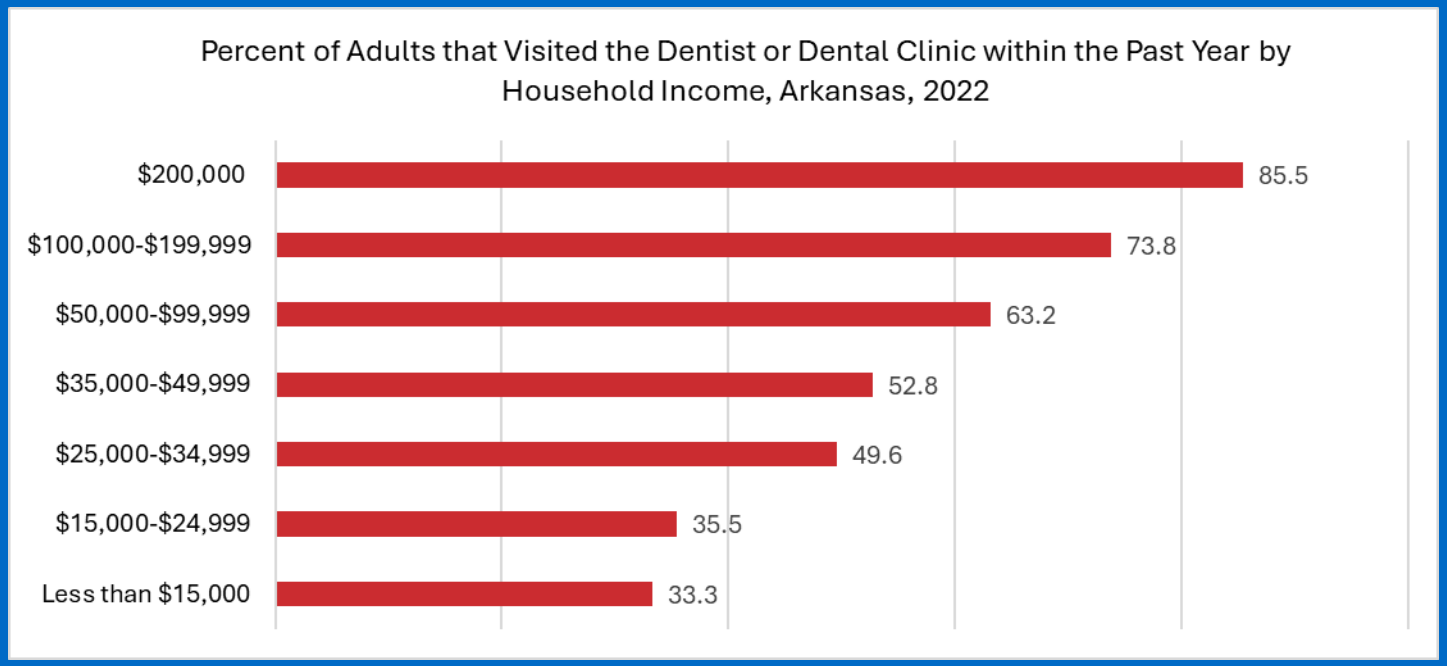
DENTAL VISITS BY AGE

Regular dental visits across the lifespan can help ensure a lifetime of good oral health.



BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
DENTAL VISITS BY RACE/ETHNICITY & INCOME



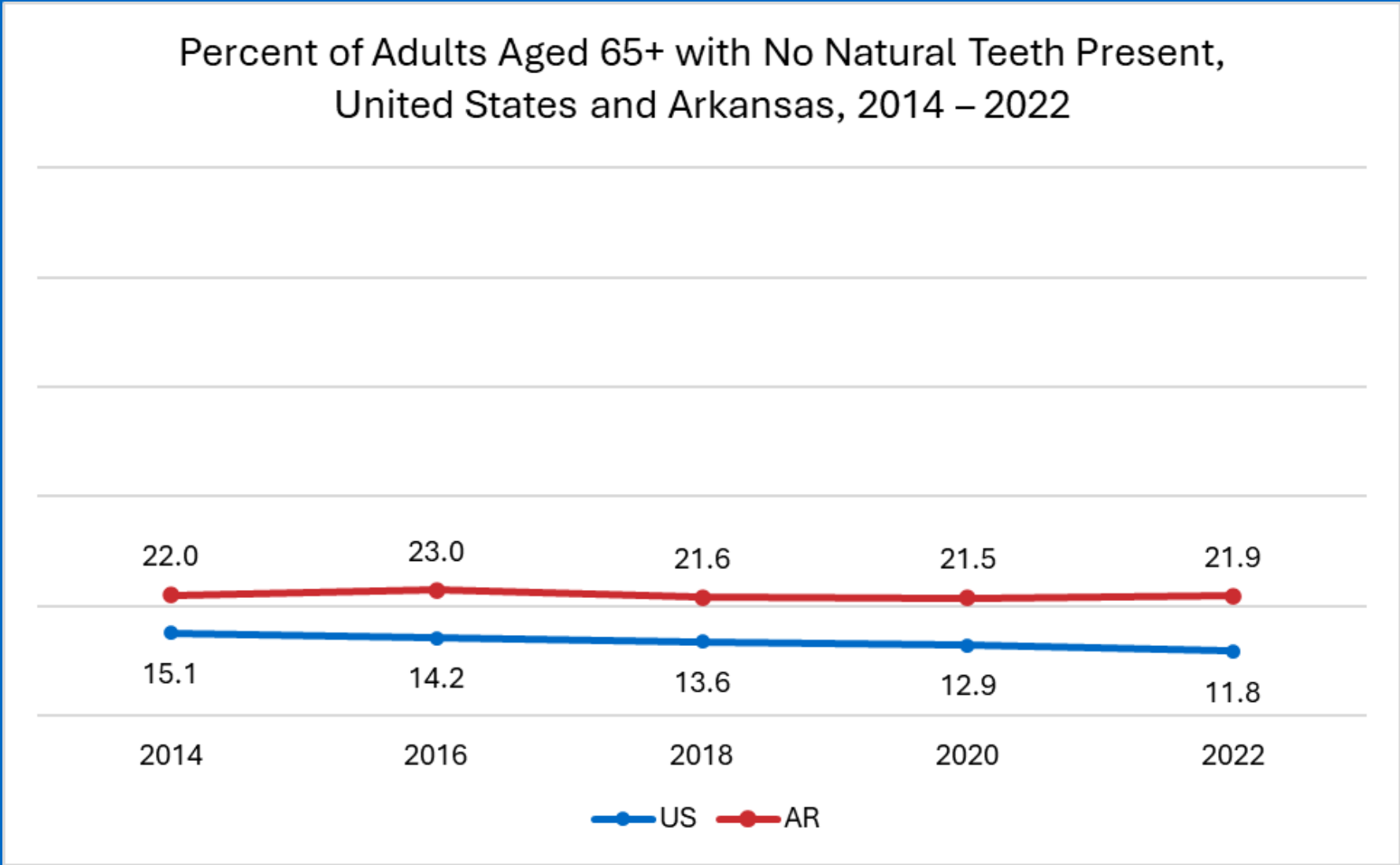


Increased household income correlates to a greater likelihood of visiting a dentist within the past year. These data indicate that accessing dental care is more difficult for individuals with lower household incomes. [1]

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

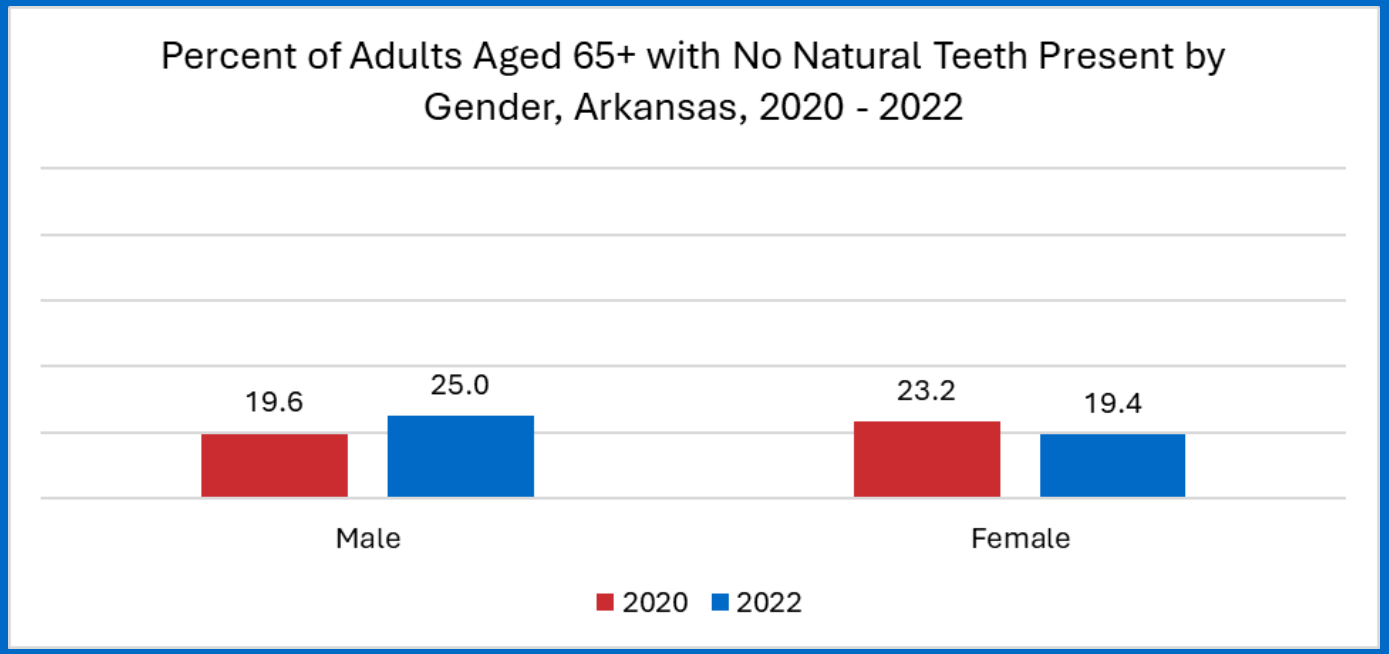
TOOTH LOSS

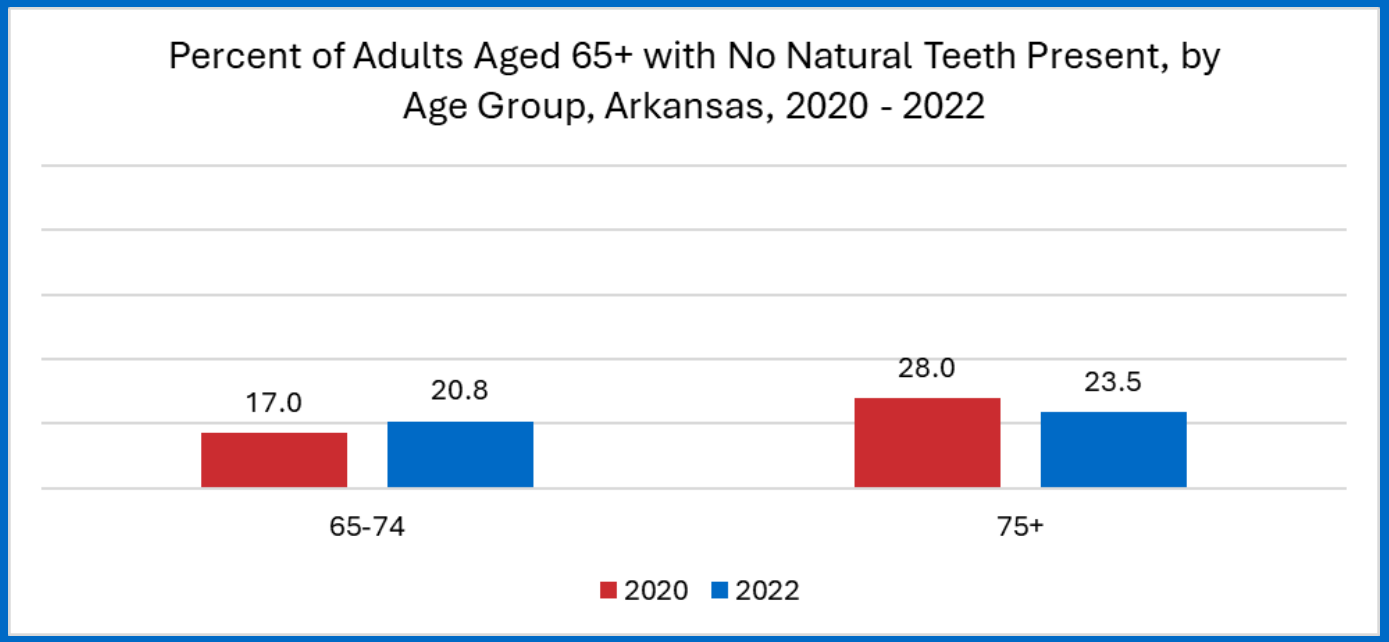
Edentulism, or having no natural teeth, can impact physical and social well-being. [2]



BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

TOOTH LOSS BY GENDER & AGE

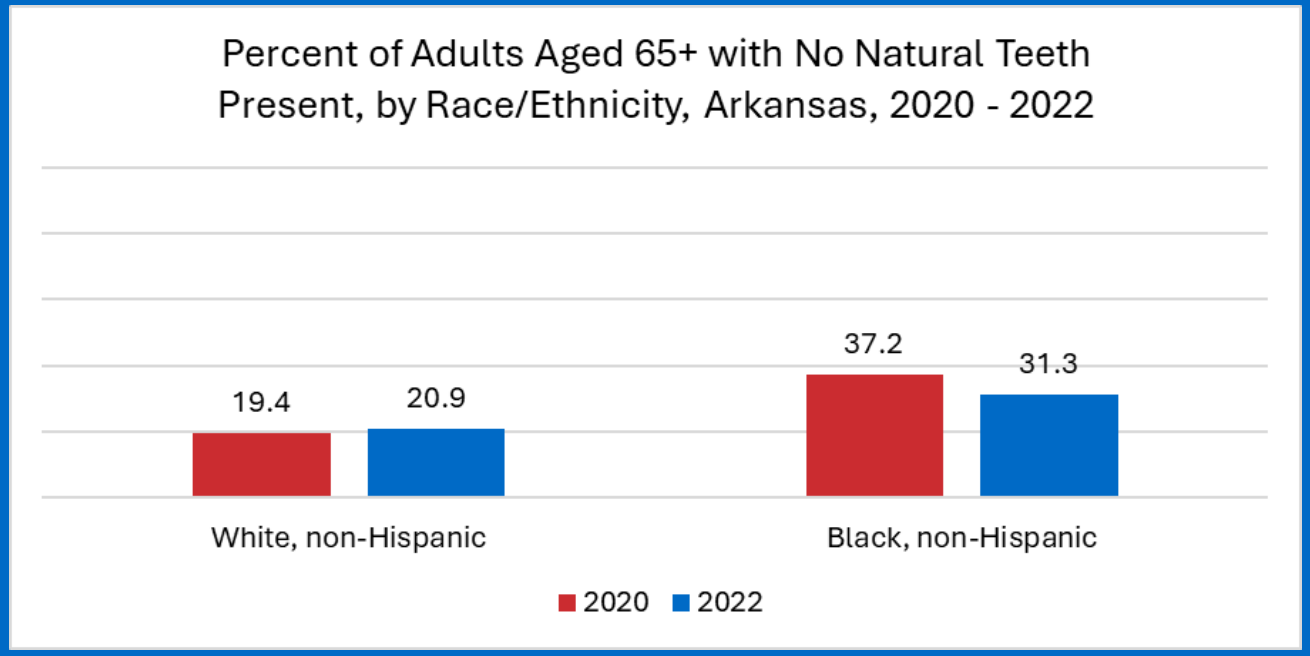


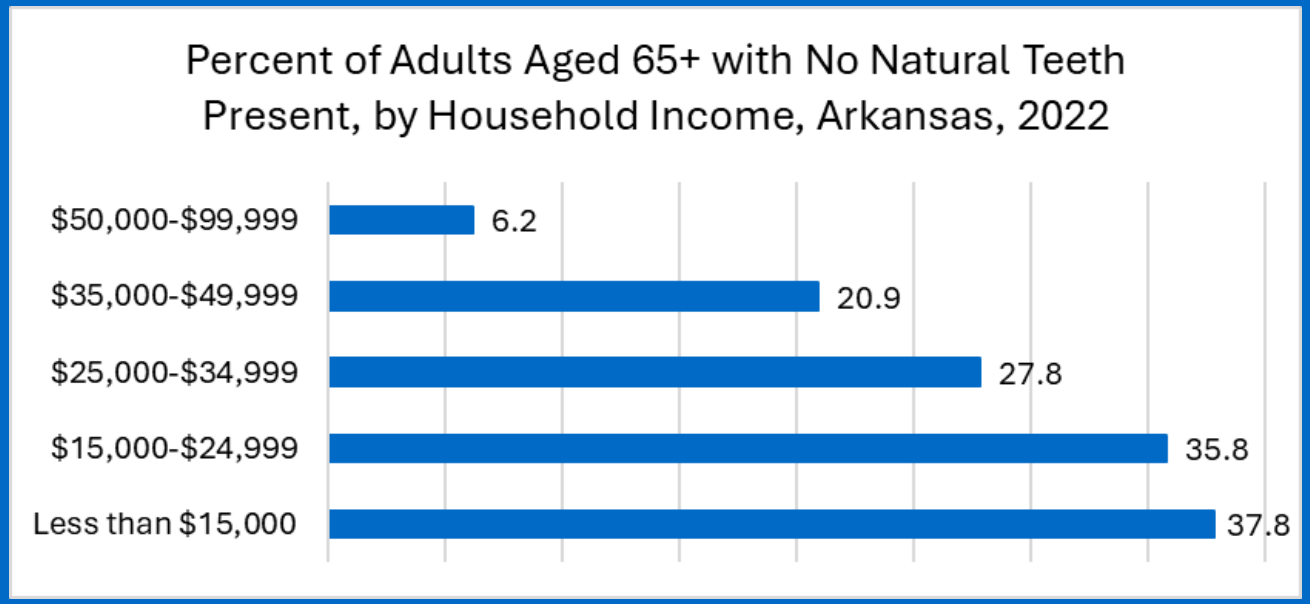


Regular dental care and daily oral hygiene throughout the lifespan increases the likelihood of retaining natural teeth as an individual ages. Edentulism among older adults can contribute to nutritional deficiencies, difficulty managing chronic conditions, and speech problems.[2]

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

TOOTH LOSS BY RACE/ETHNICITY & INCOME



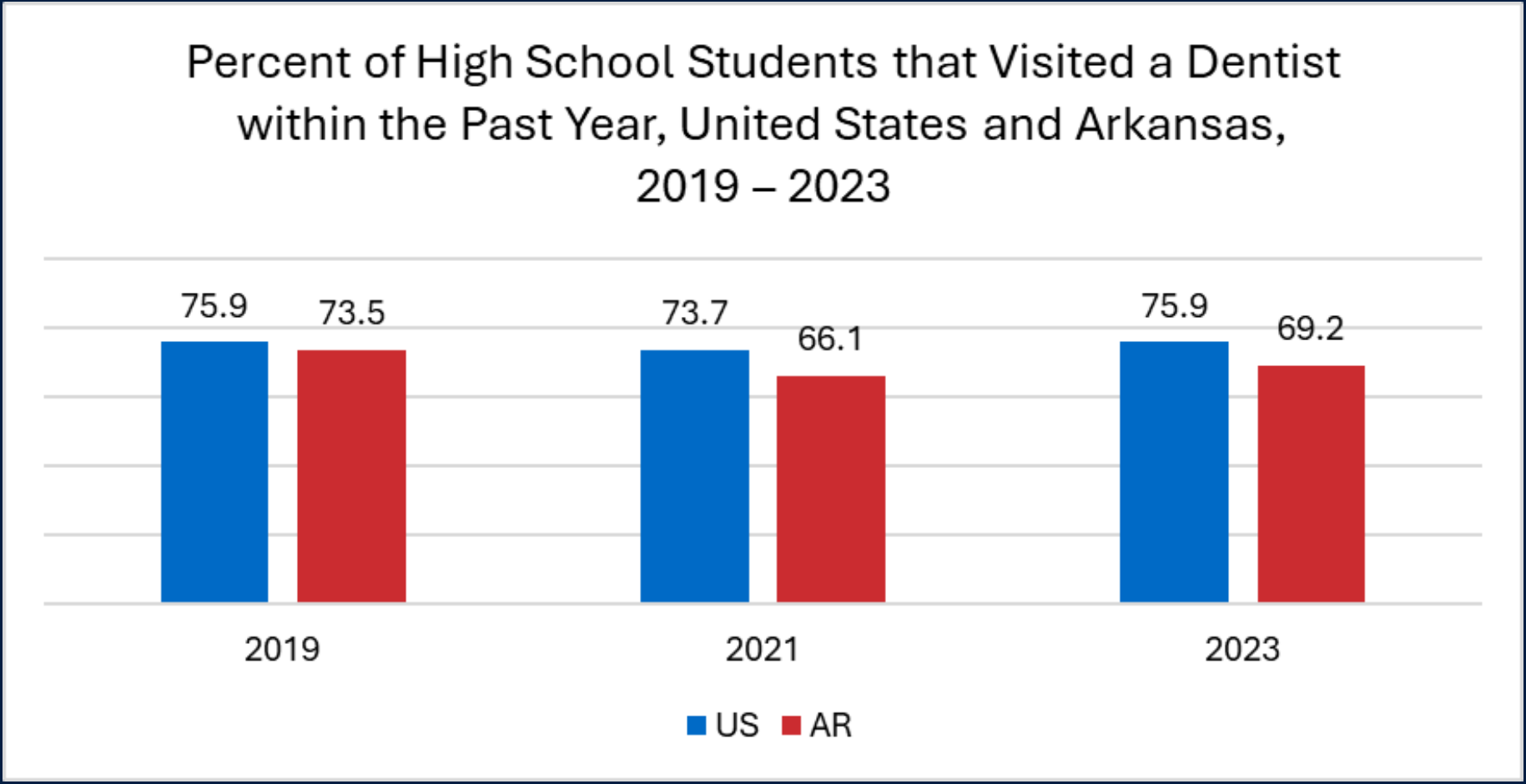


Increased household income correlates to a greater likelihood of maintaining natural teeth. Without regular dental care, oral disease can advance to a degree where extraction is the only option for treatment. These data indicate that individuals with lower household income are more likely to not have their natural teeth, which may be related to financial barriers of accessing regular dental care.

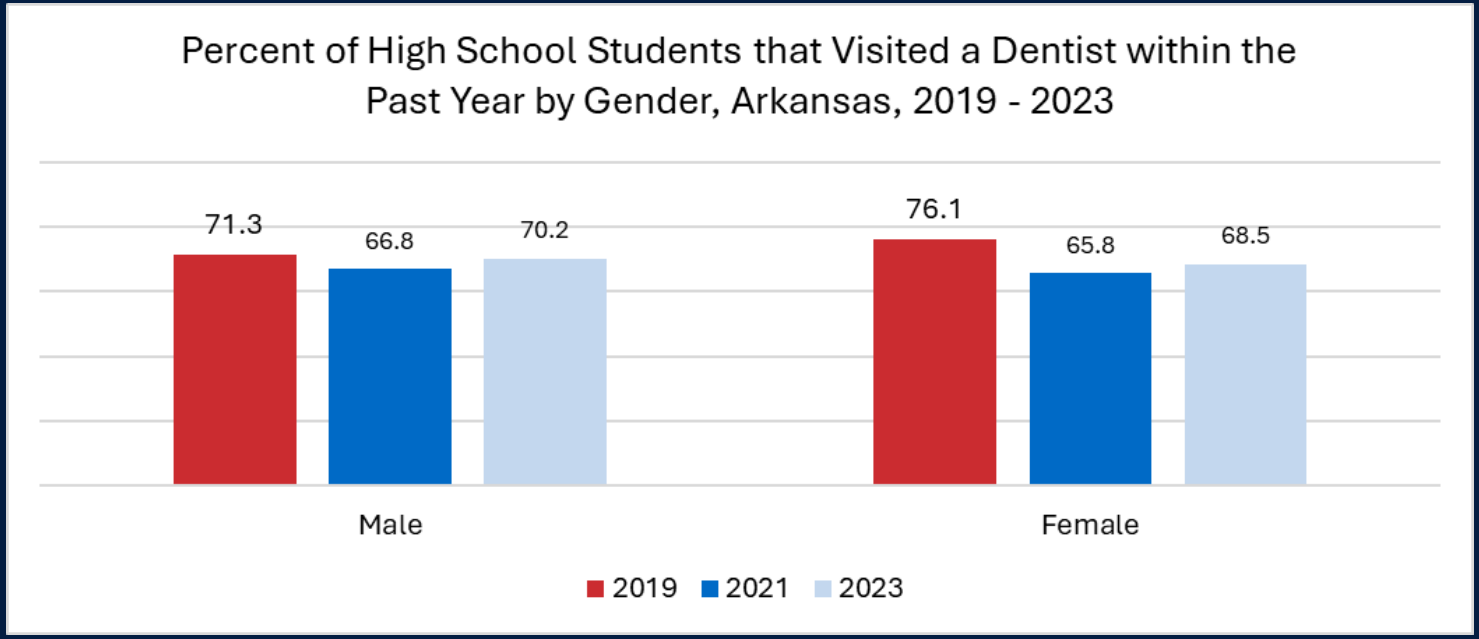
YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM

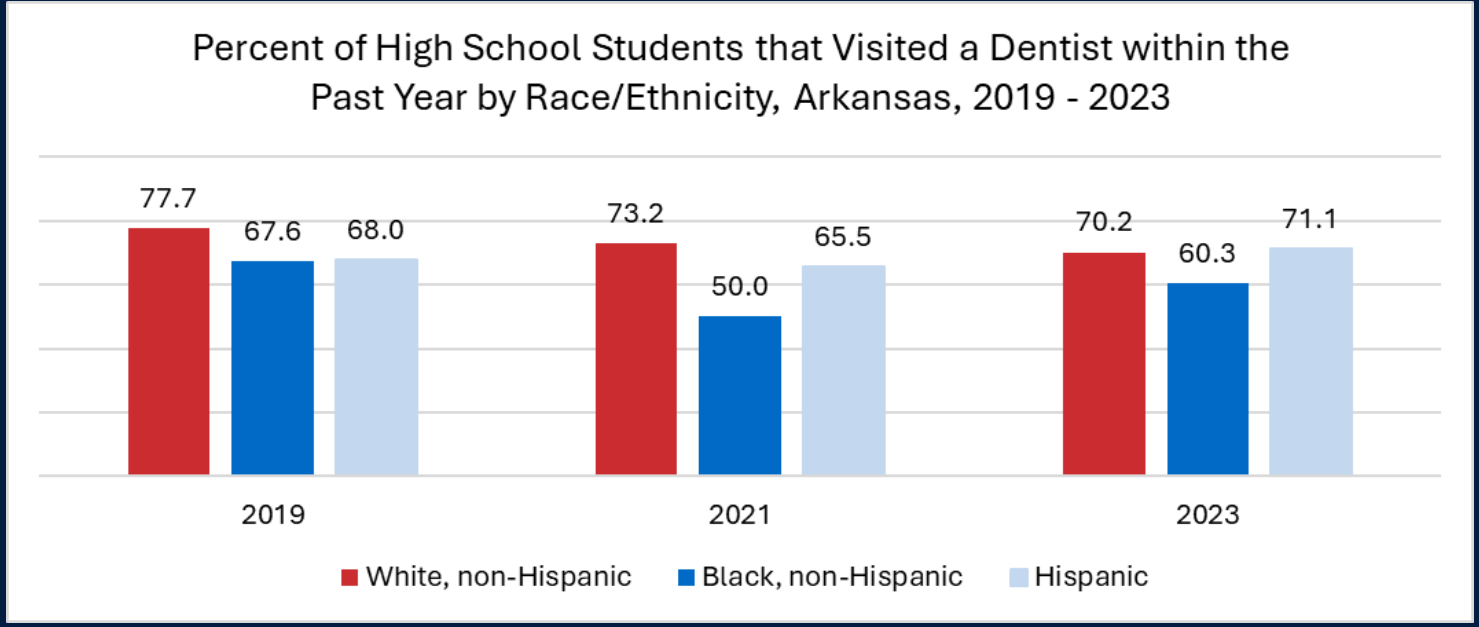
DENTAL VISITS AMONG YOUTH

Adolescence brings physical and behavioral changes that can impact oral health. National data show that more than half of adolescents have had a cavity in at least one of their adult (permanent) teeth.



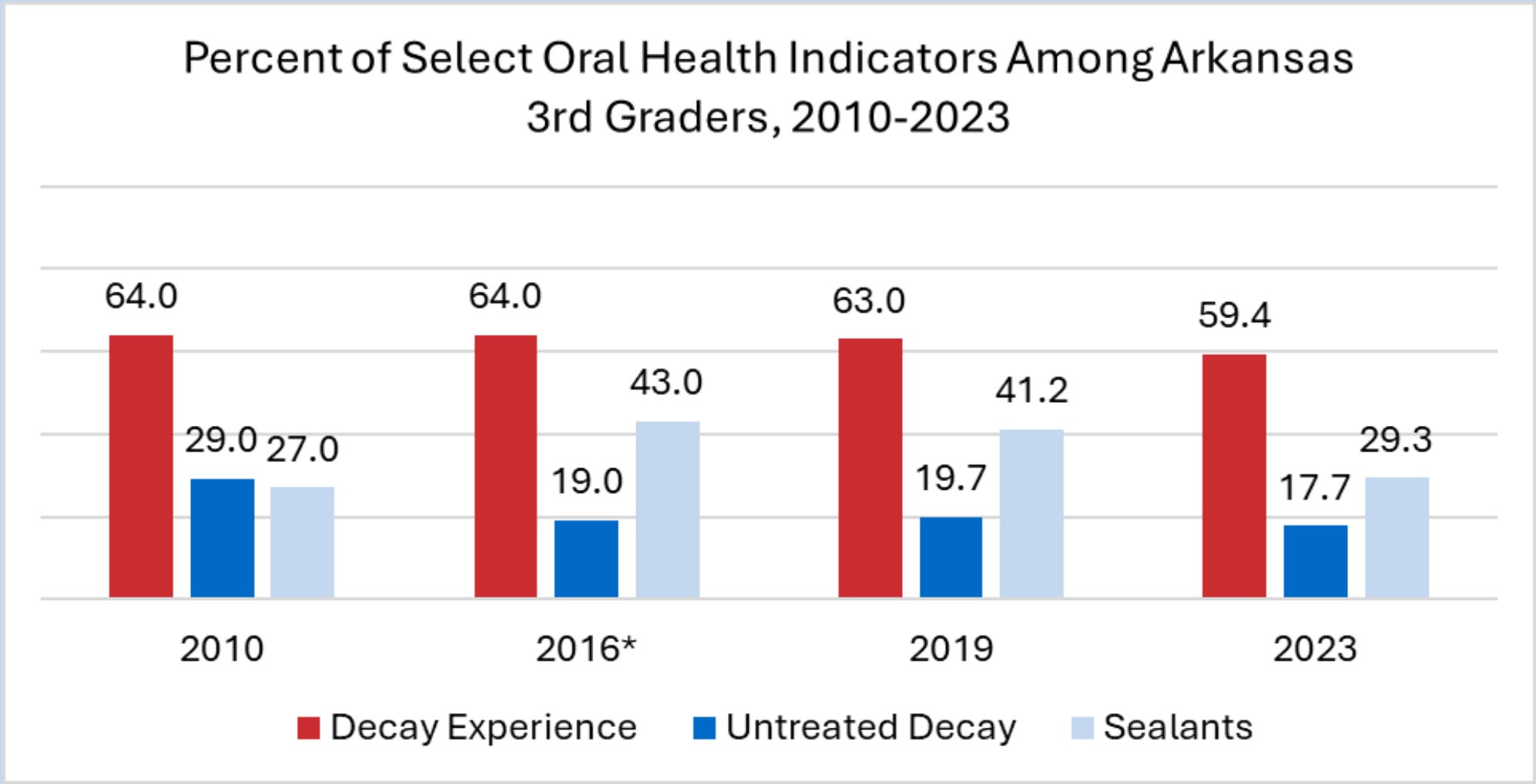
YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM
DENTAL VISITS BY GENDER & RACE





ARKANSAS 3RD GRADE BASIC SCREENING SURVEY

KEY ORAL HEALTH INDICATORS



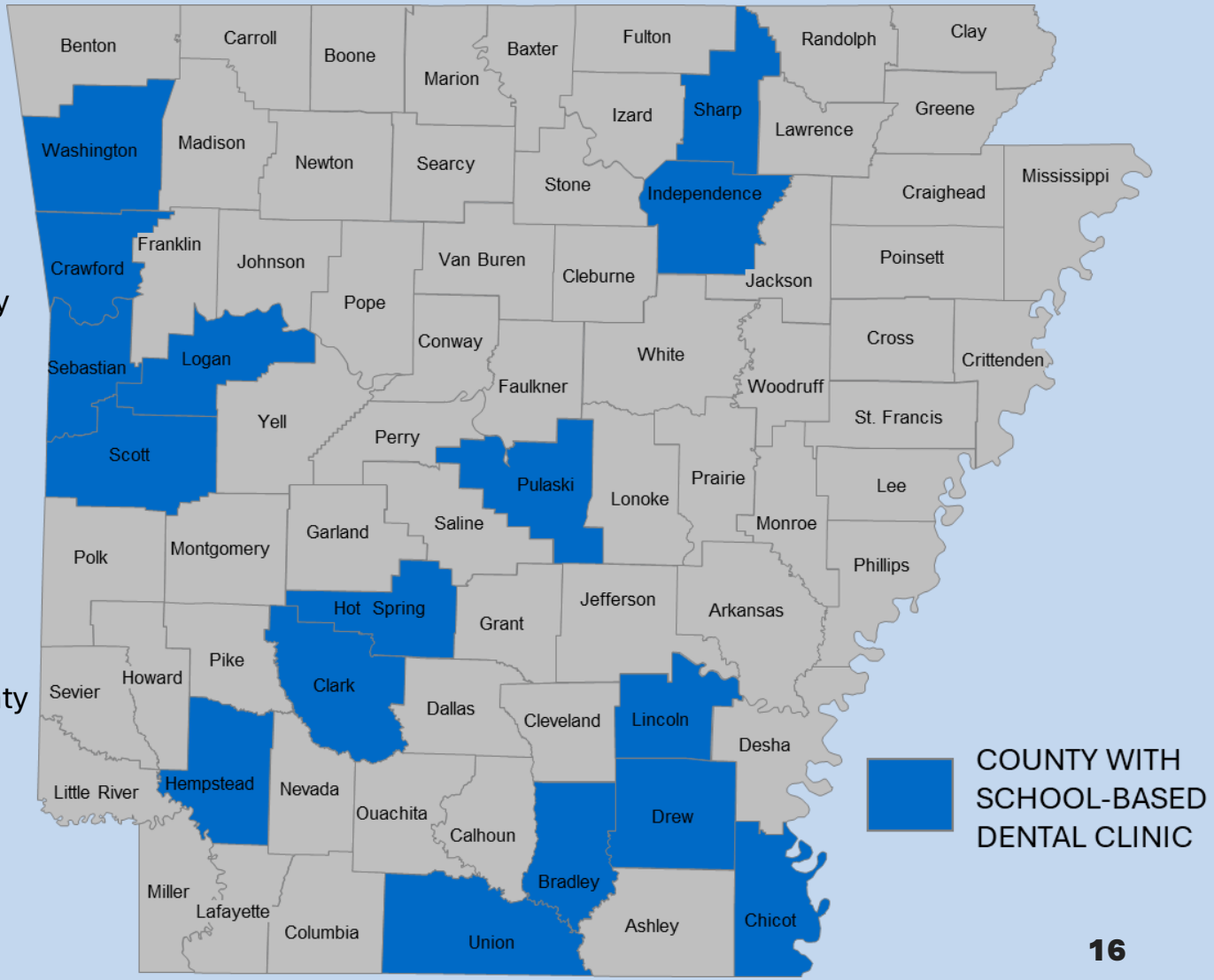
*Methodological changes were made for 2016 sample size; caution is recommended in interpretation.

SCHOOL-BASED DENTAL HEALTH CARE

SCHOOL-BASED DENTAL CLINICS

School-based health care improves access by meeting children where they are—on school campuses. Nineteen (19) Arkansas school districts currently house on-campus dental clinics:

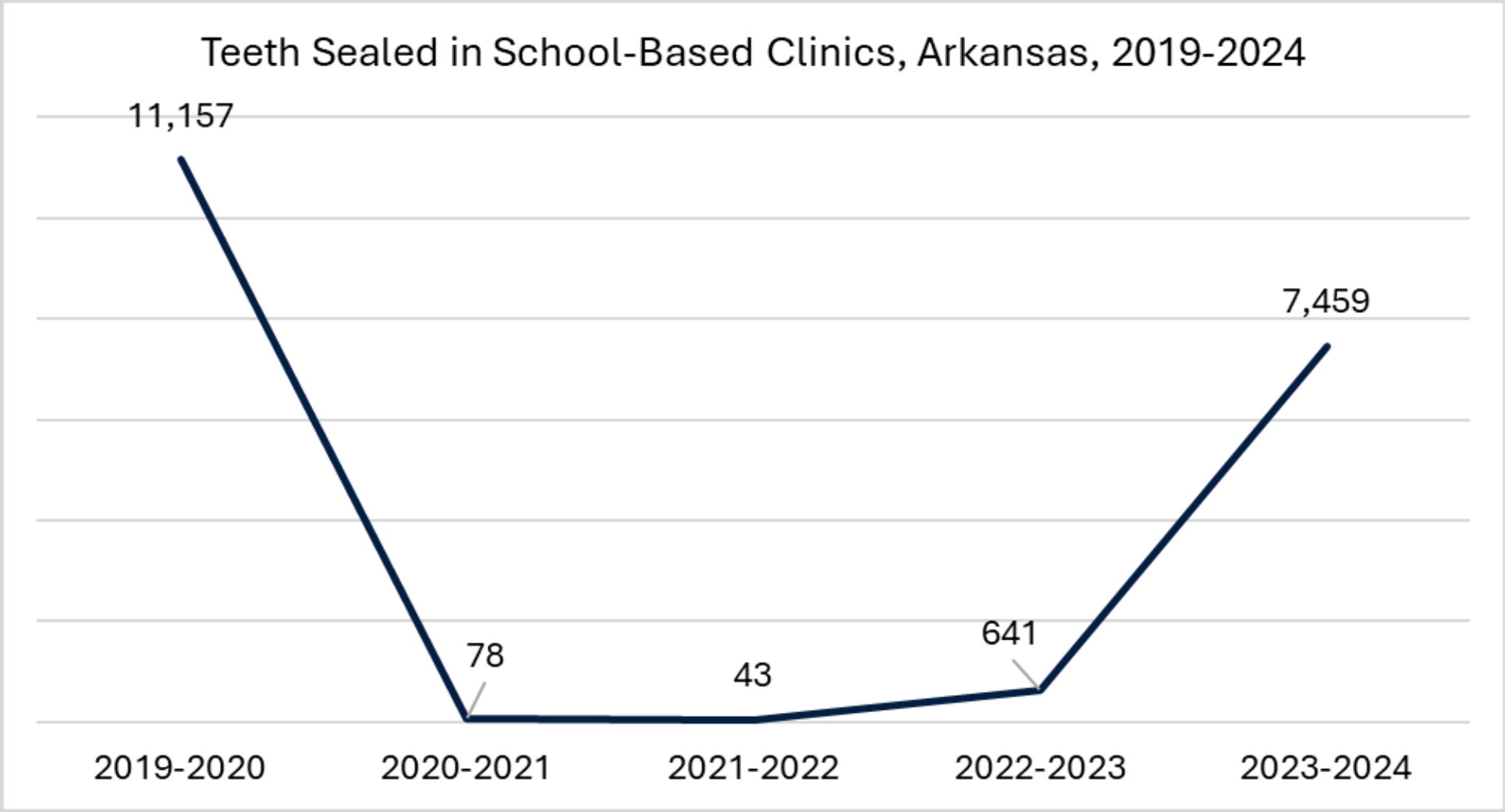
1. Booneville-Logan County
2. Cedarville-Crawford County
3. Dermott-Chicot County
4. Drew Central-Drew county
5. El Dorado-Union County
6. Eudora-Chicot County
7. Fayetteville-Washington County
8. Gurdon-Clark County
9. Highland-Sharp County
10. Hope-Hempstead County
11. Lakeside-Chicot County
12. Lavaca-Sebastian County
13. Little Rock-Pulaski County
14. Magazine-Logan County
15. Malvern-Hot Spring County
16. Mansfield-Scott County
17. Southside-Independence County
18. Star City-Lincoln County
19. Warren-Bradley County



SCHOOL-BASED DENTAL HEALTH CARE

SCHOOL-BASED SEALANT CLINICS

Dental sealants are thin, resin coatings placed on the molars of children and are designed to protect the chewing surfaces from tooth decay.

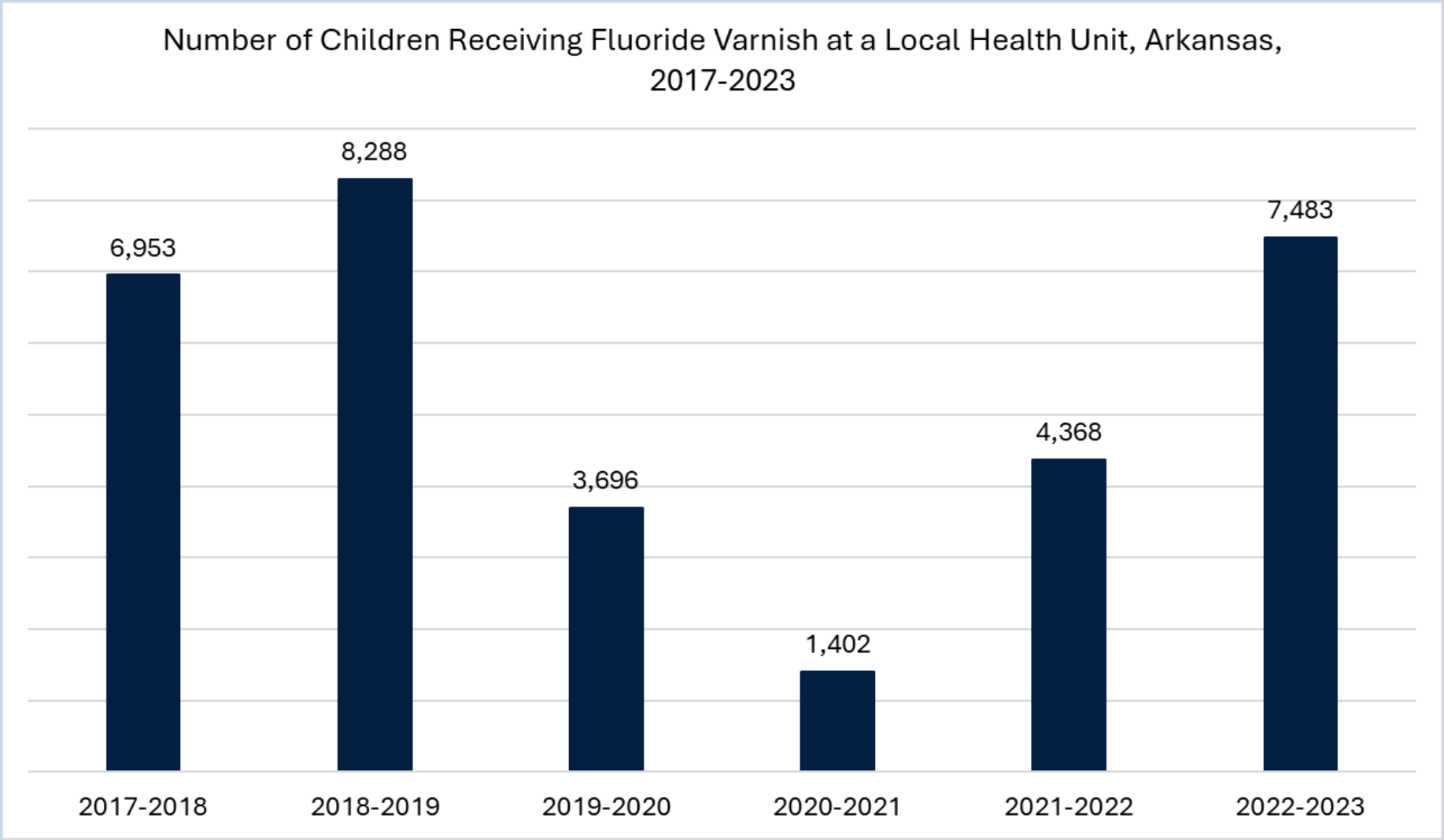


SOURCE: ADH OFFICE OF ORAL HEALTH INTERNAL DATA

ORAL HEALTH AT THE LOCAL HEALTH UNIT

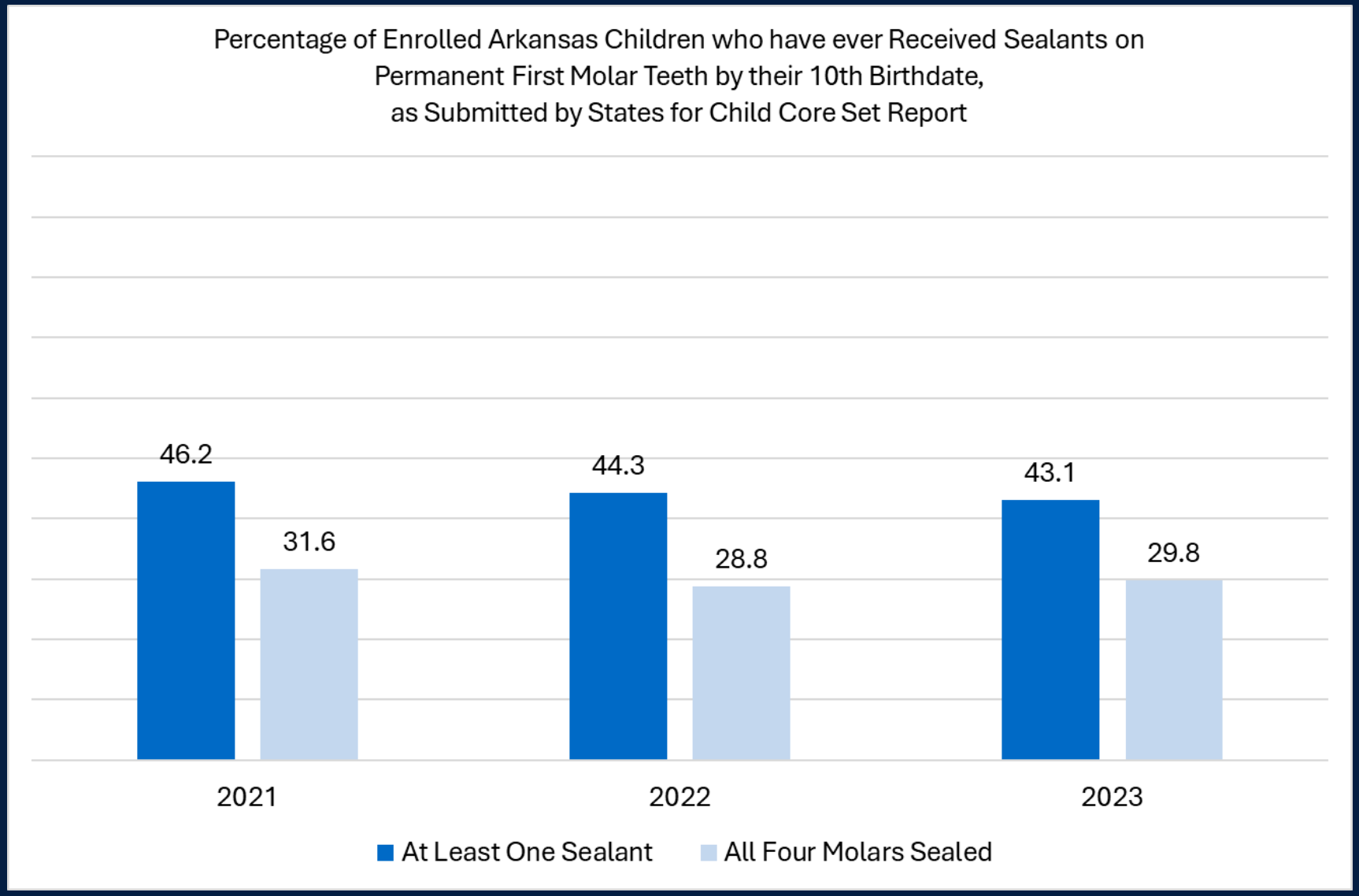
PAINT-A-SMILE PROGRAM

Children aged 18 and younger can receive a fluoride varnish at any local health unit across the state. Fluoride varnish is applied to the teeth in a thin layer that helps protect tooth enamel from decay.

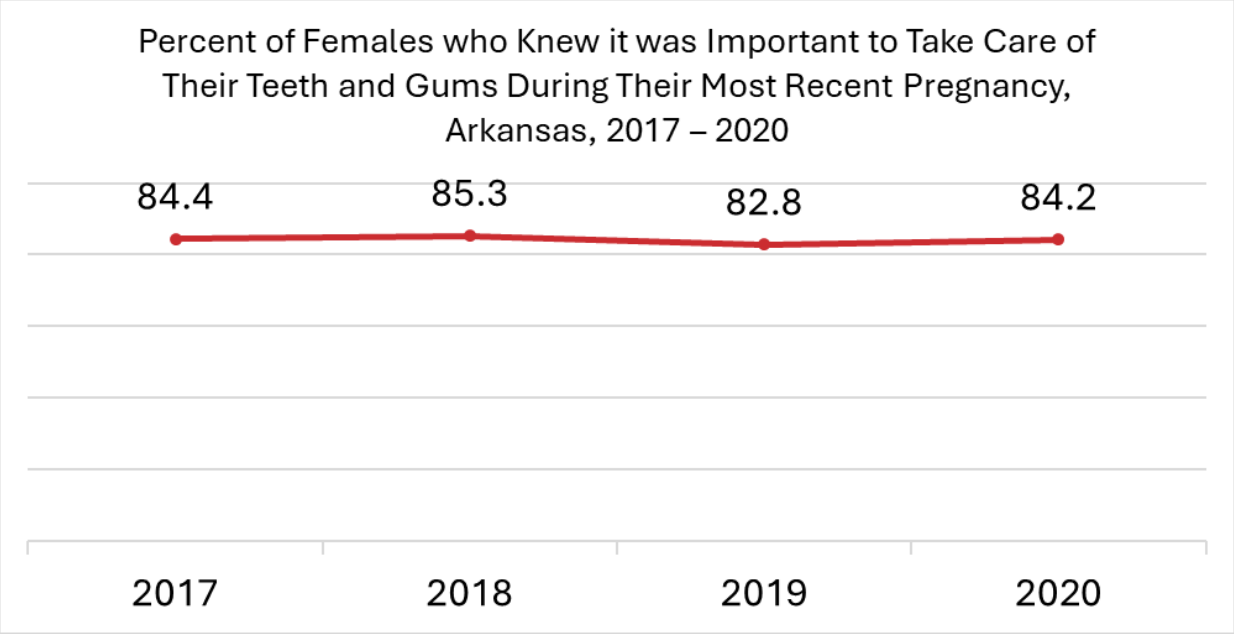


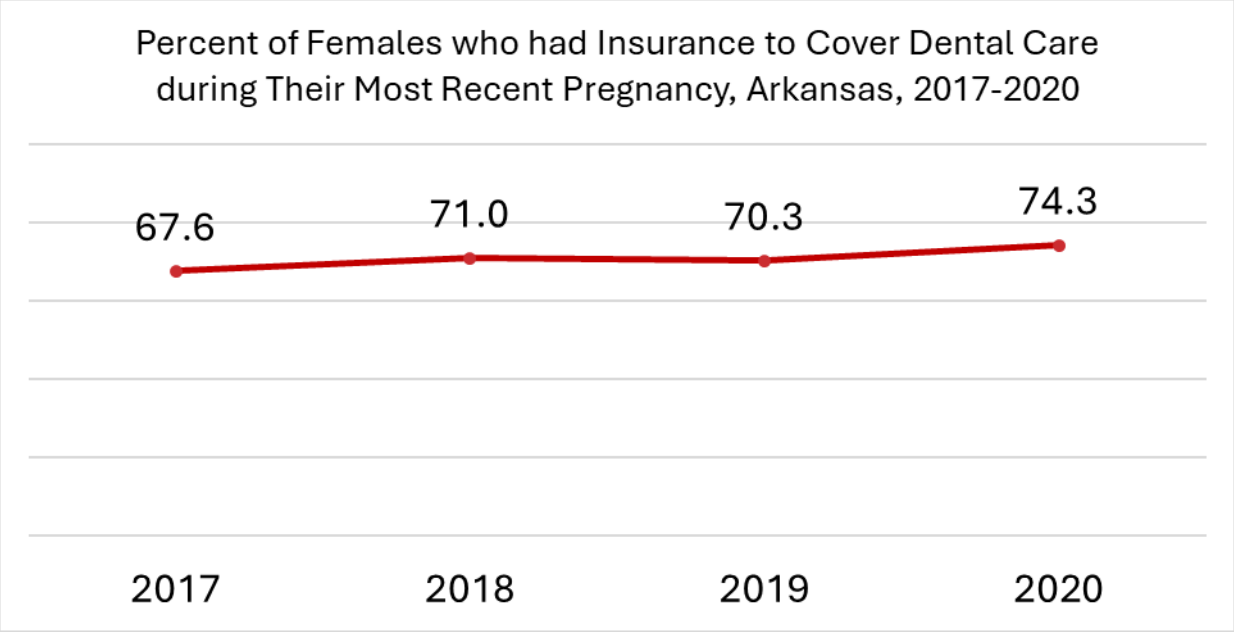
CHILD CORE SET MEASURES FOR MEDICAID & CHIP
SEALANTS

Sealants are most effective when applied as soon as permanent molars come in. First molars typically come in around age 6; second molars come in around age 12.



PREGNANCY RISK ASSESSMENT MONITORING SYSTEM
IMPORTANCE OF ORAL CARE & ACCESS

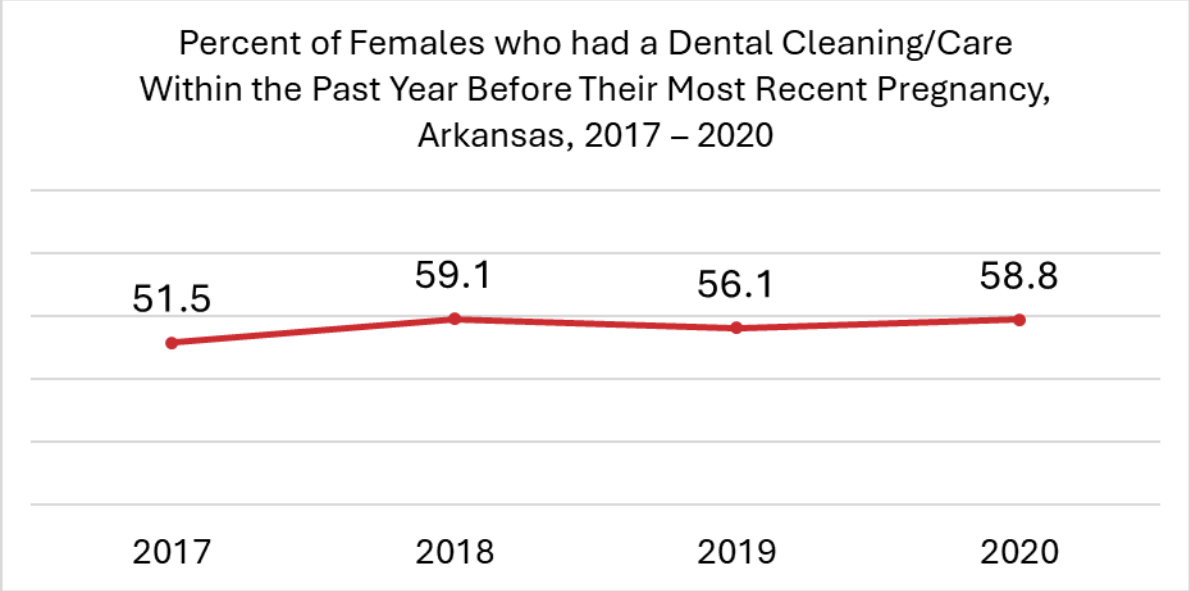


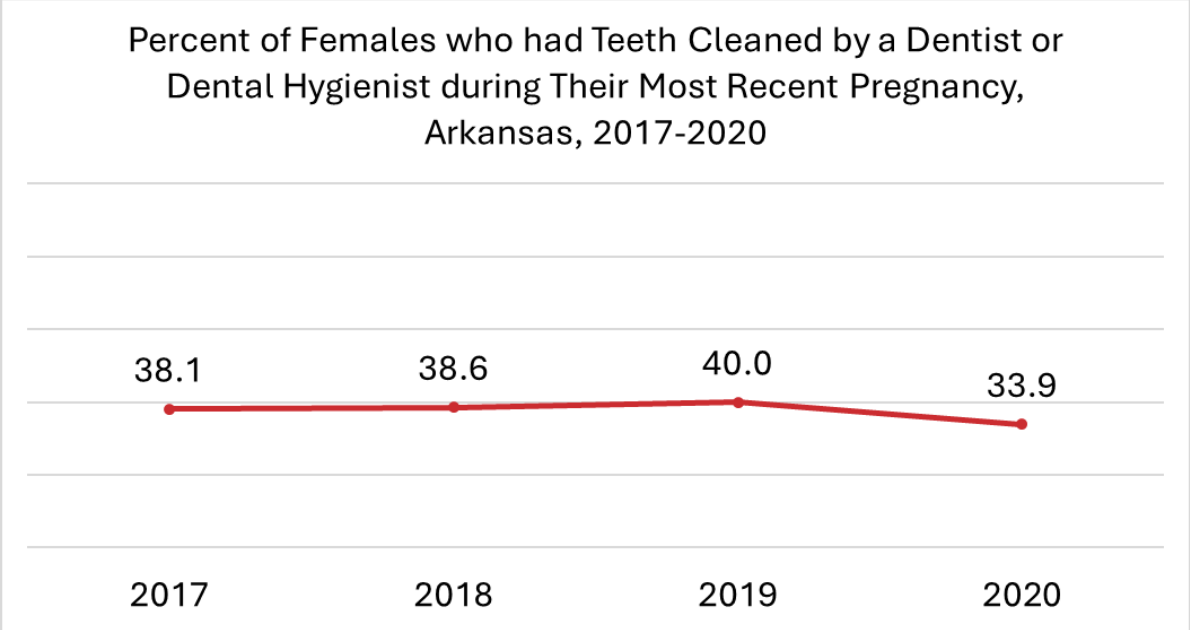


Changes that naturally occur during pregnancy put women at higher risk for oral disease. These data indicate that many Arkansas women understand the importance of caring for their teeth during pregnancy. Most Arkansas women also have dental insurance to cover the cost of dental visits during pregnancy.

PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

DENTAL VISITS BEFORE & DURING PREGNANCY

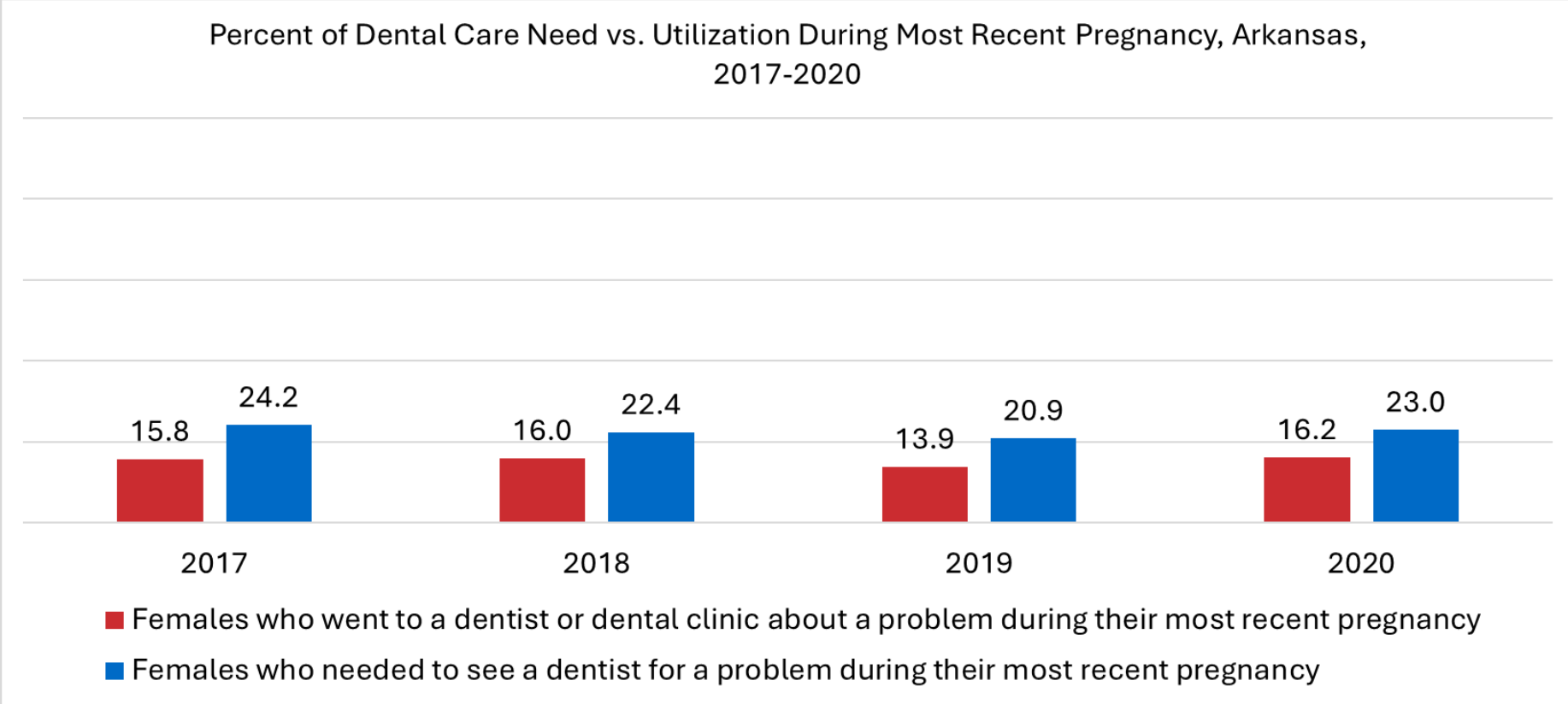




Although many women understand the importance of dental care during pregnancy and have dental insurance to help cover the cost of care, less than half of women had their teeth cleaned during their most recent pregnancy. These data indicate there are other barriers to care during pregnancy that may exist. Dental treatment is safe and recommended during pregnancy.

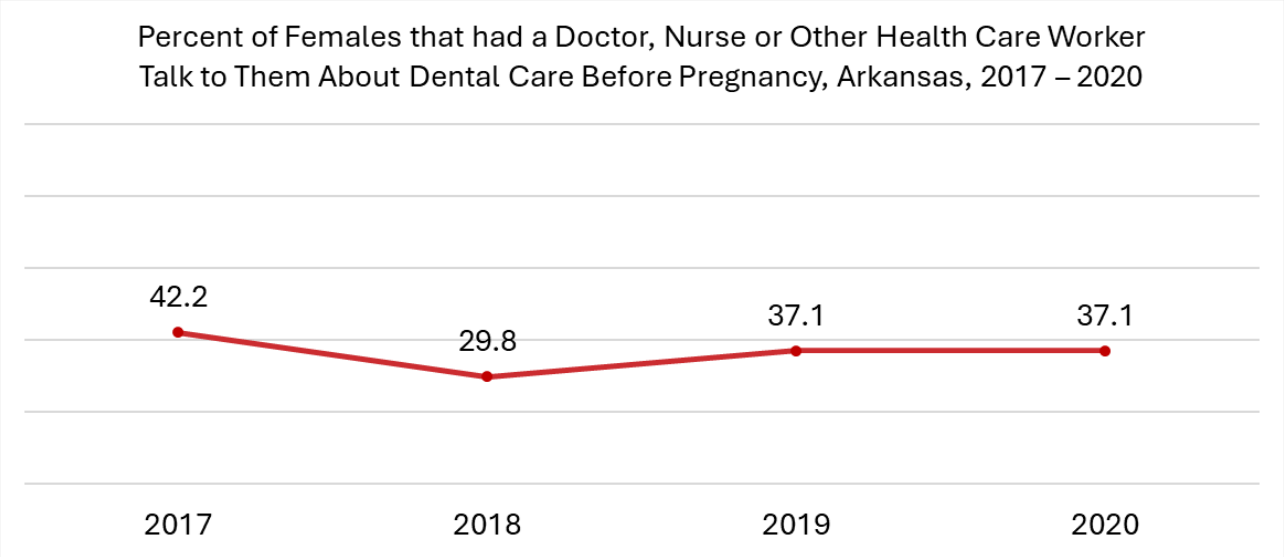
PREGNANCY RISK ASSESSMENT MONITORING SYSTEM
DENTAL CARE NEED VS. UTILIZATION

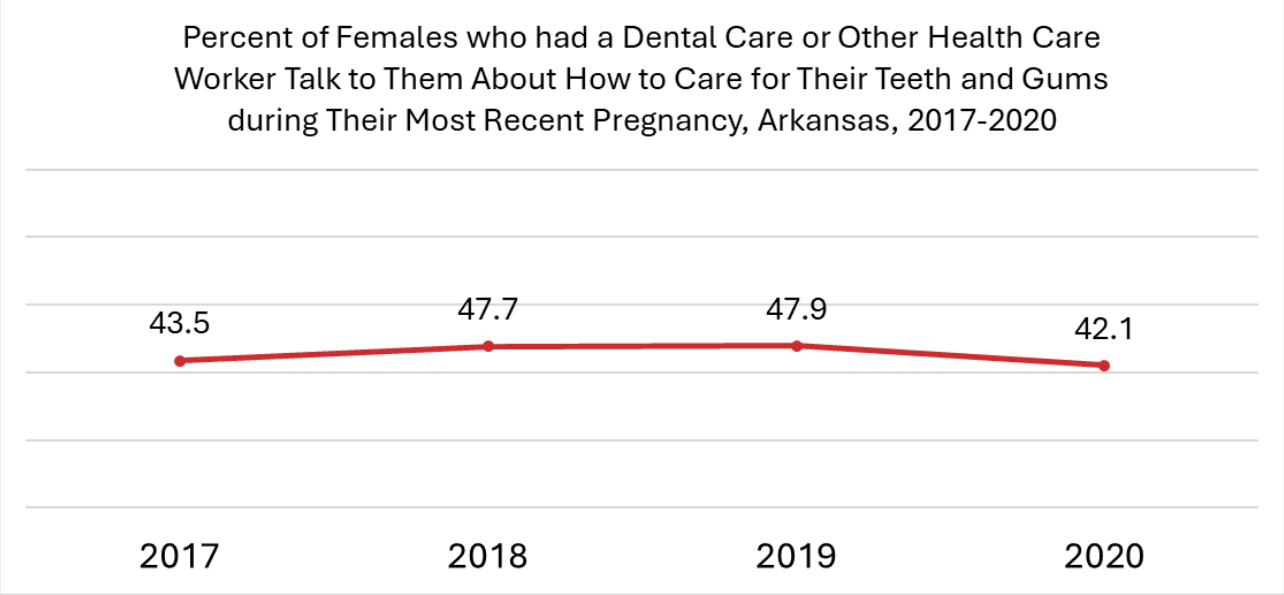
Dental care during pregnancy is safe and recommended by the American College of Obstetricians and Gynecologists.



PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

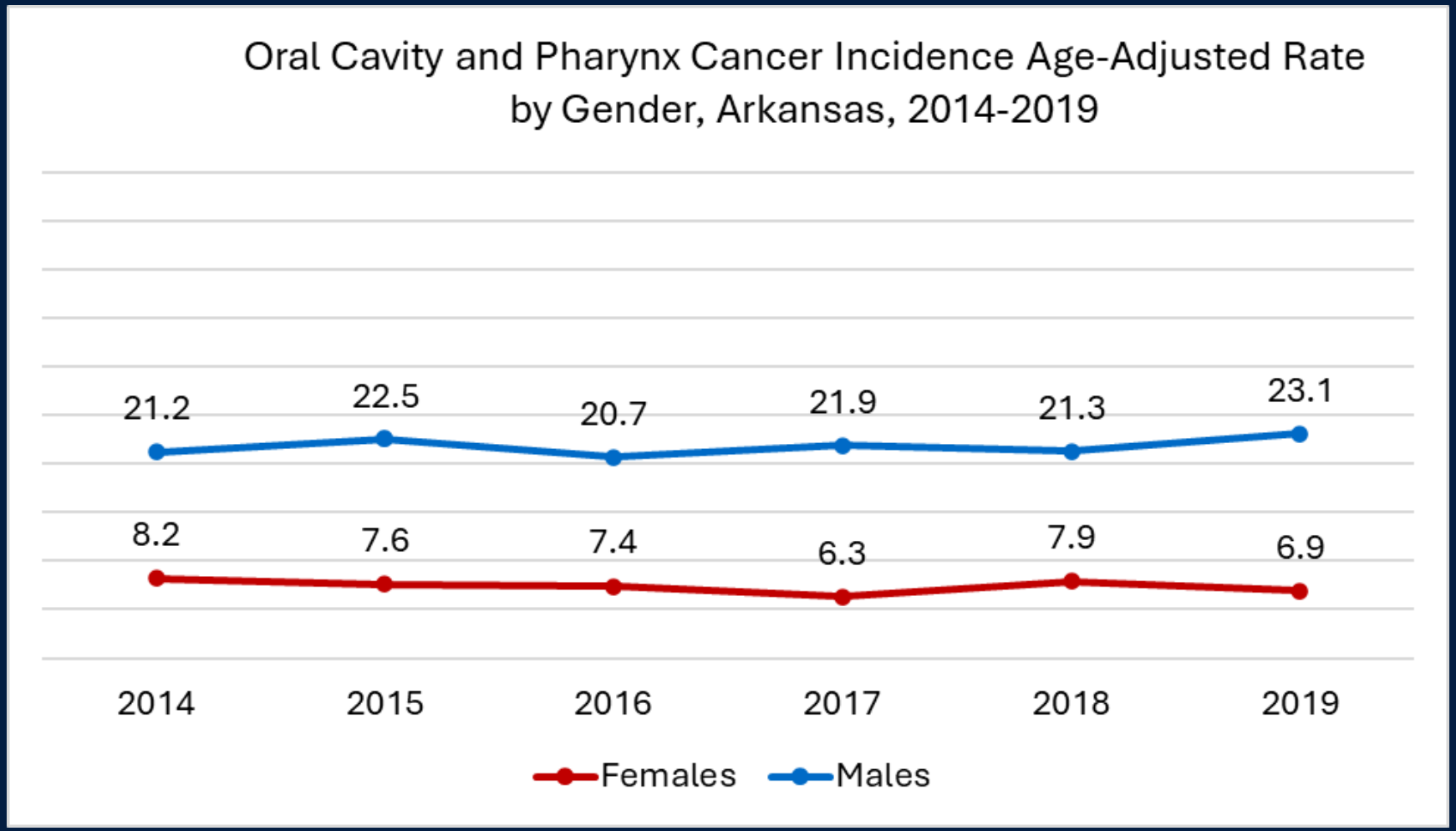
ORAL HEALTH CONVERSATIONS IN THE MEDICAL SETTING





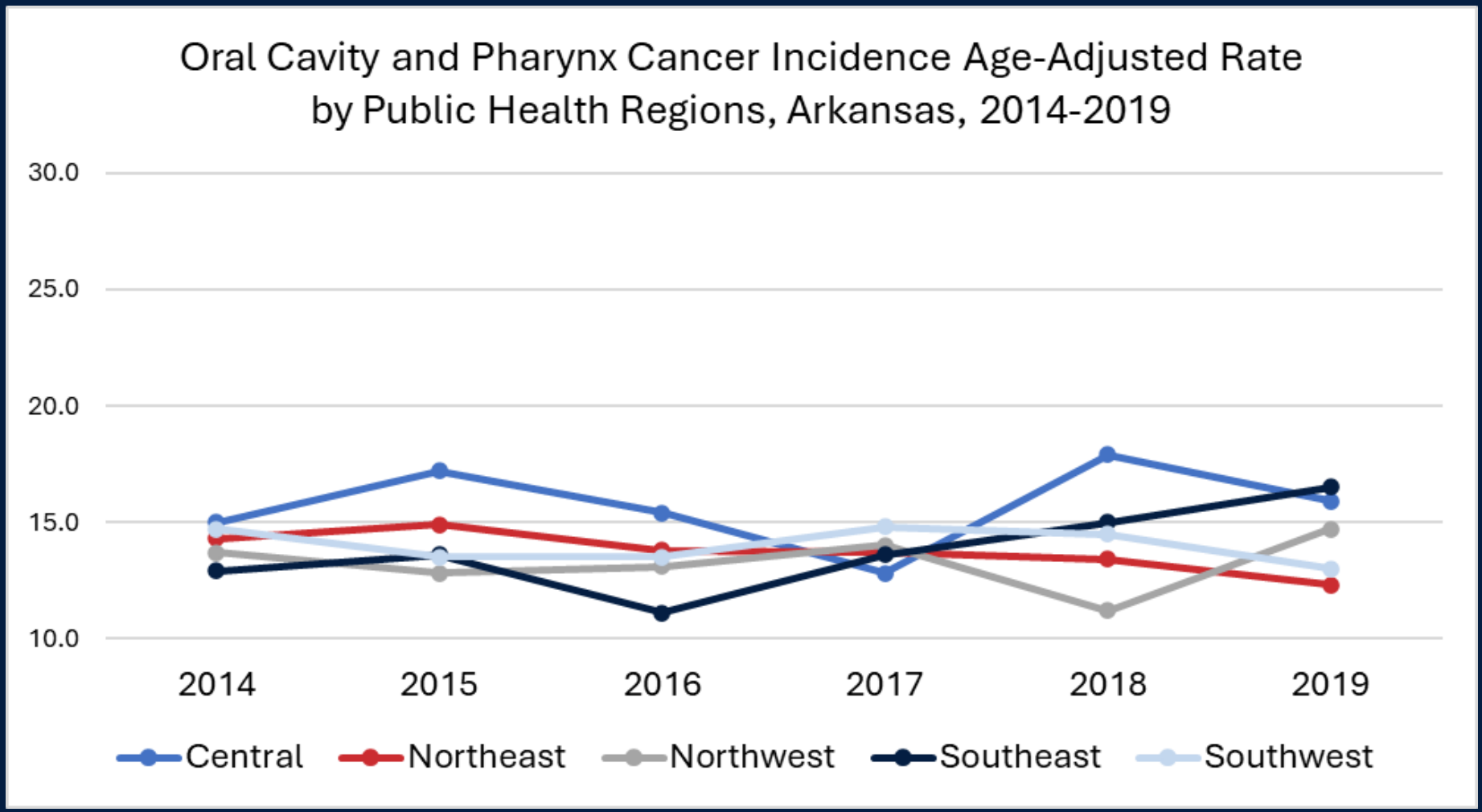
Untreated oral disease, such as periodontitis (gum disease), has been associated with poor pregnancy outcomes, including preterm birth and low birth weight. [4] A conversation about the importance of oral health with a medical provider can support healthy oral health habits for pregnant women.

ARKANSAS CANCER REGISTRY QUERY SYSTEM
INCIDENCE BY GENDER



Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population; All Cancer Incidence as the data source.

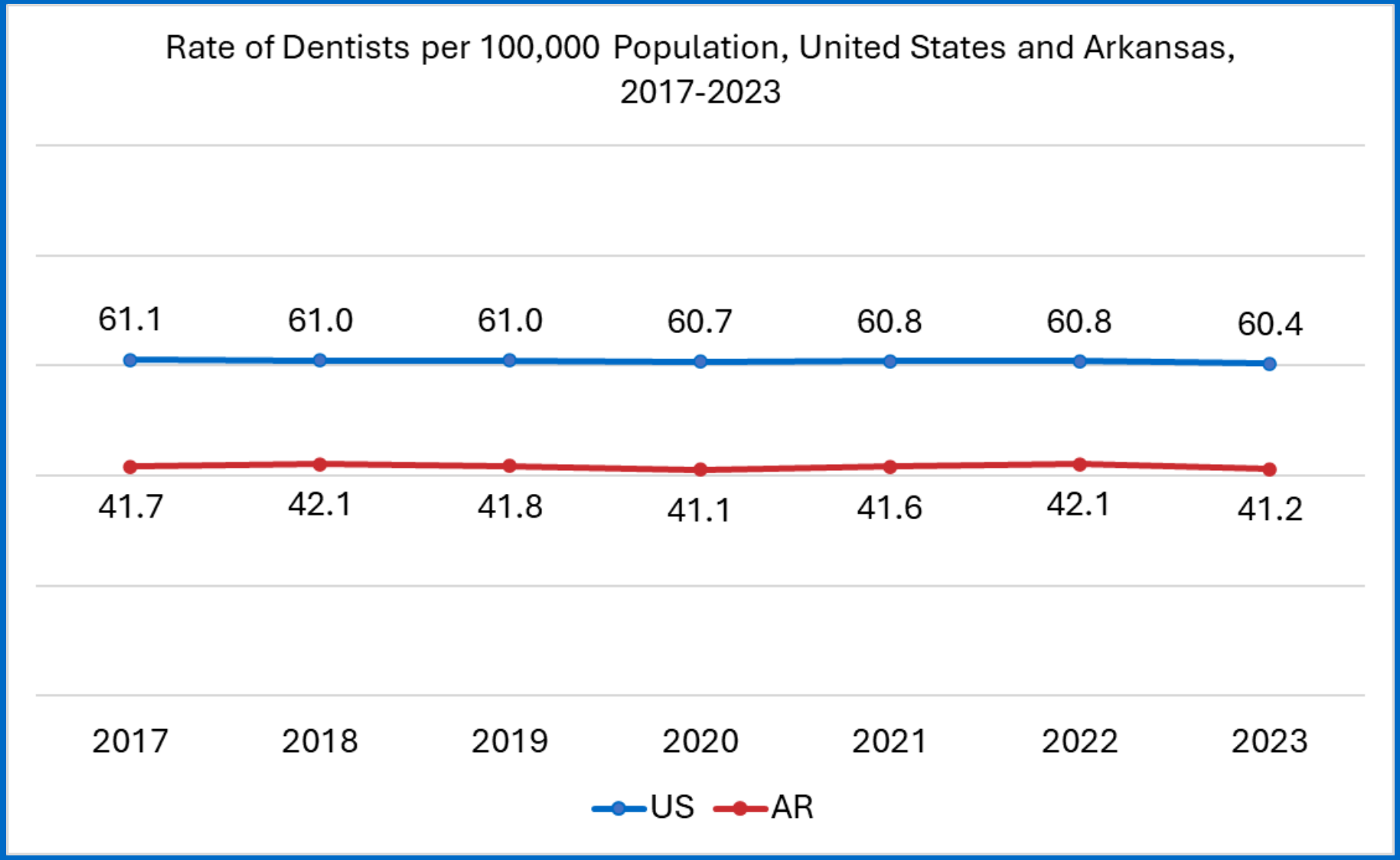
ARKANSAS CANCER REGISTRY QUERY SYSTEM
INCIDENCE BY PUBLIC HEALTH REGION



Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population; All Cancer Incidence as the data source.

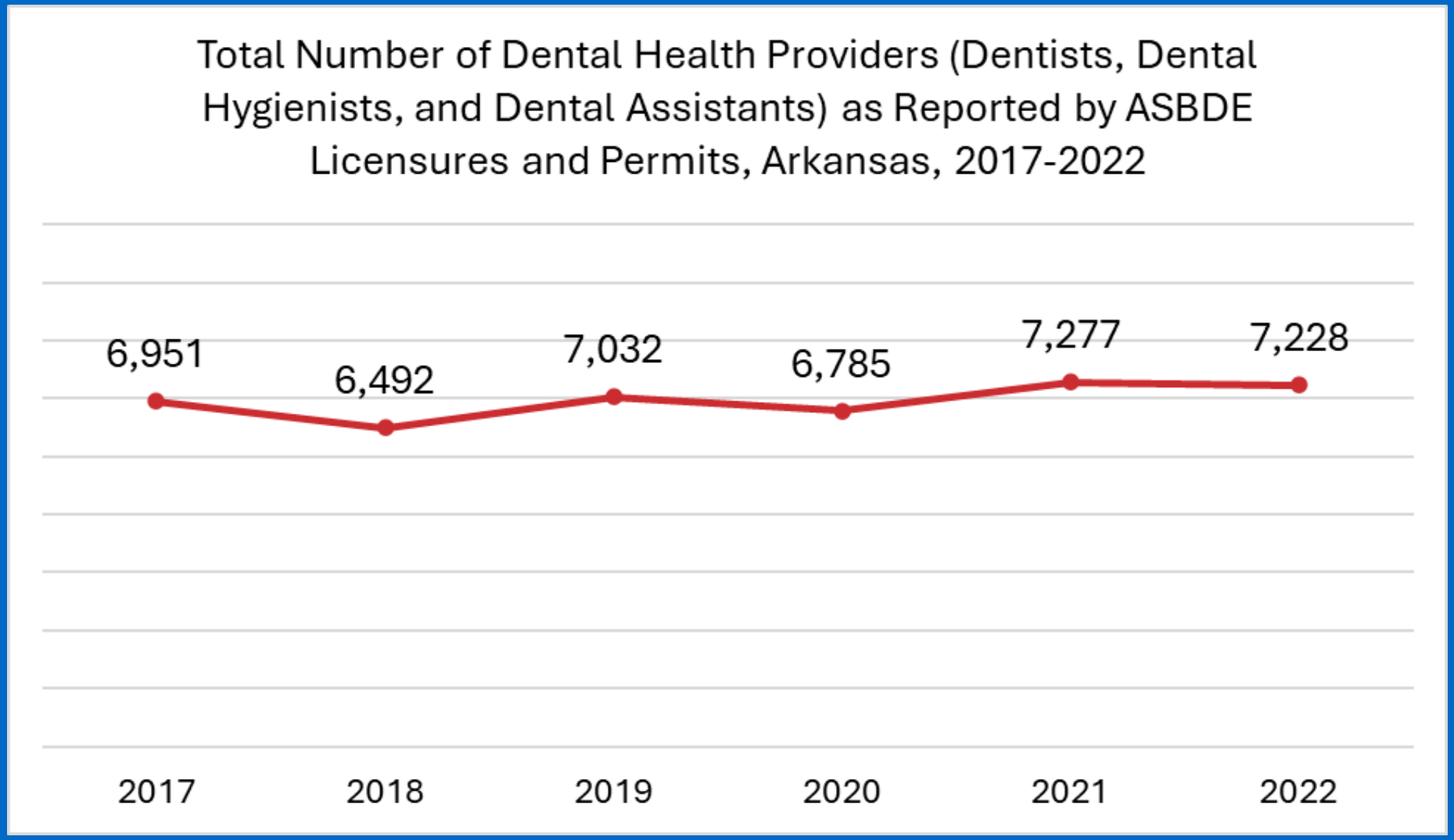
ORAL HEALTH PROFESSIONALS IN ARKANSAS

DENTIST WORKFORCE



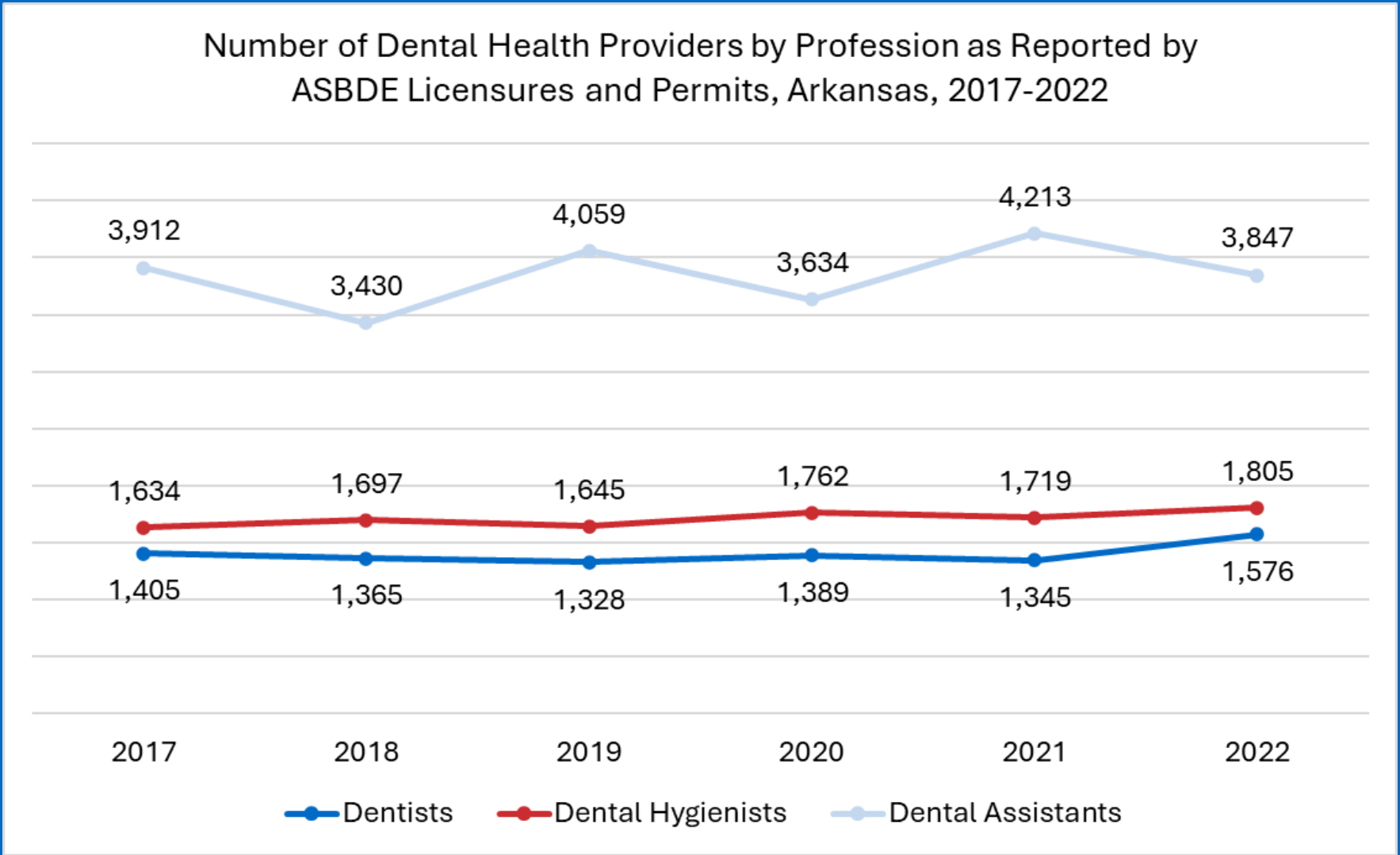
ORAL HEALTH PROFESSIONALS IN ARKANSAS

TOTAL COUNT OF DENTAL PROVIDERS

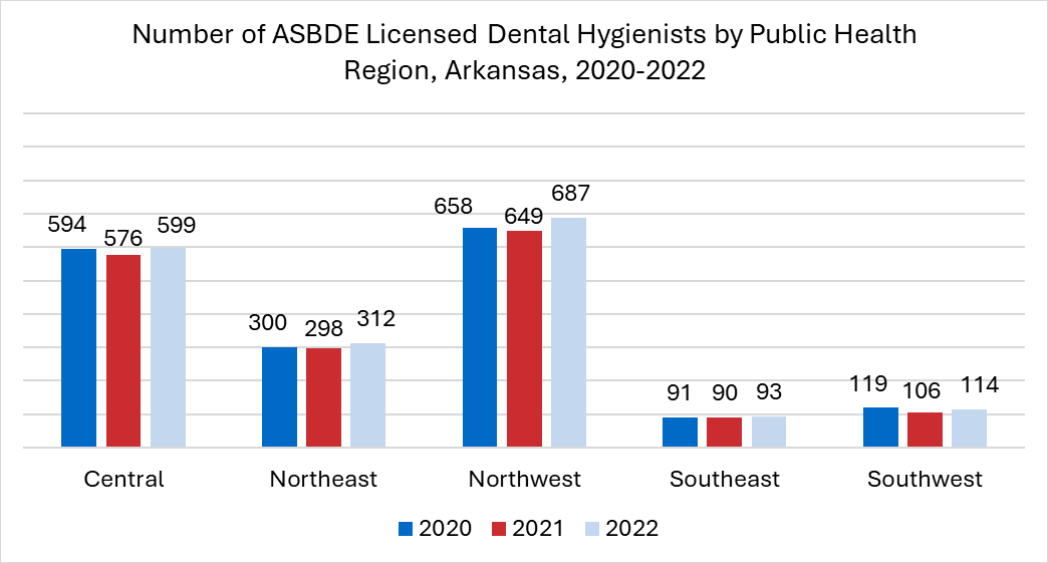


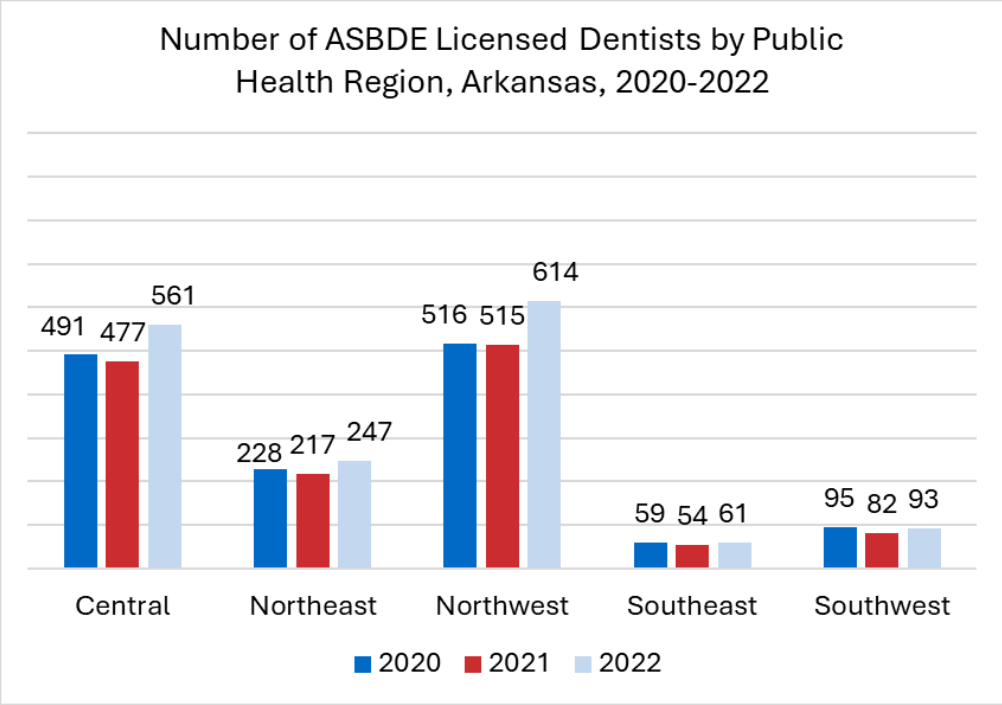
ORAL HEALTH PROFESSIONALS IN ARKANSAS

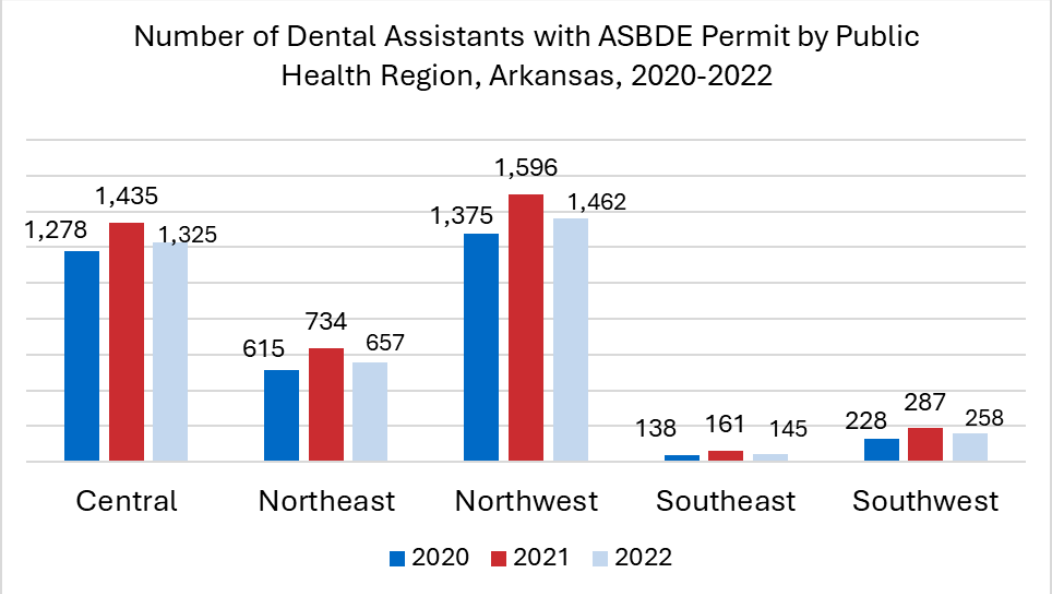
BY PROFESSION



ORAL HEALTH PROFESSIONALS IN ARKANSAS
BY GEOGRAPHIC REGION







SOURCE: ARKANSAS STATE BOARD OF DENTAL EXAMINERS LICENSURE LISTS

ORAL HEALTH PROFESSIONALS IN ARKANSAS

POPULATION TO DENTIST RATIO IN 2022

These are estimates of person to dentist ratio by public health region.

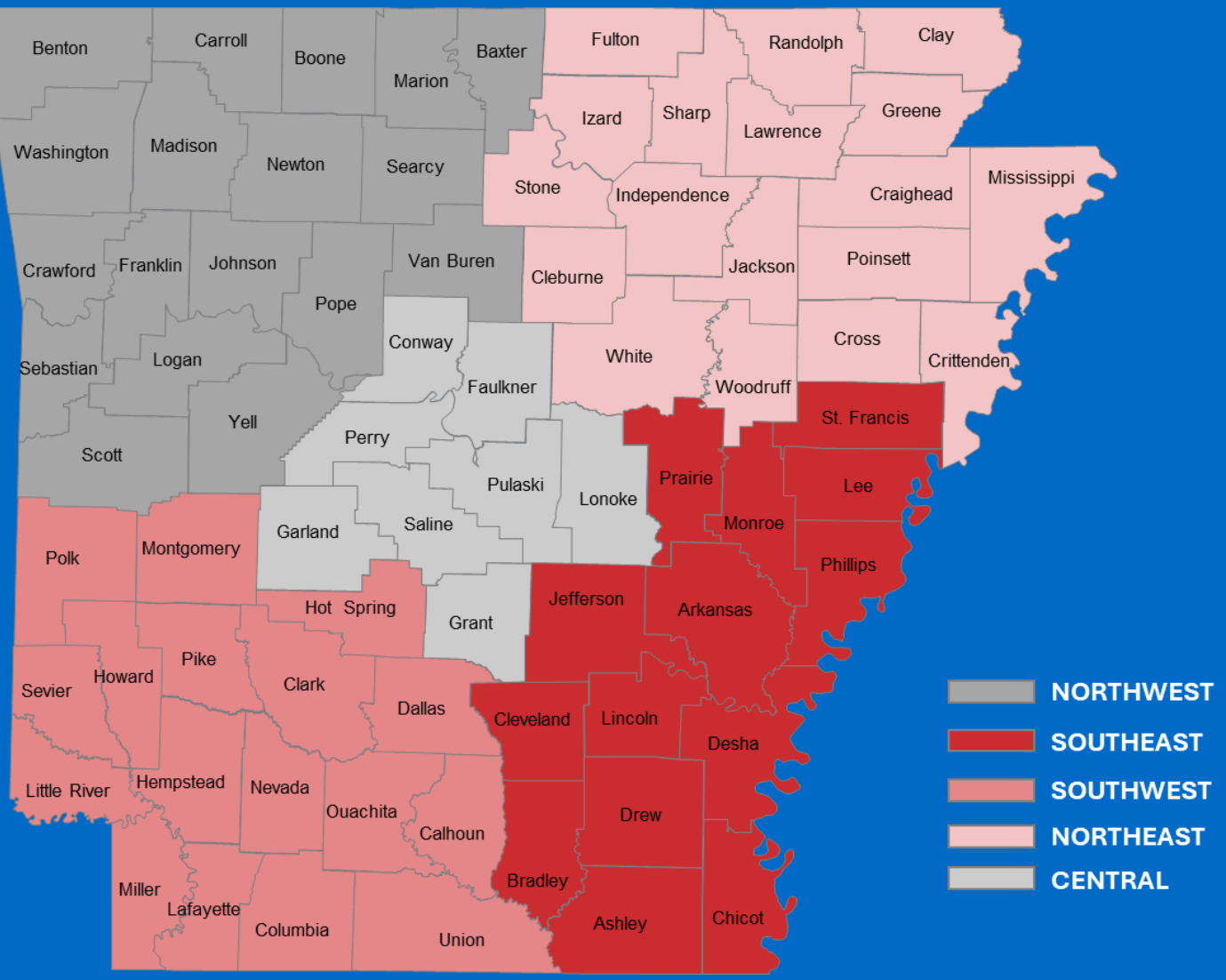
NORTHWEST: 1,750:1

SOUTHEAST: 3,870:1

SOUTHWEST: 3,290:1

NORTHEAST: 2,240:1

CENTRAL: 1,515:1

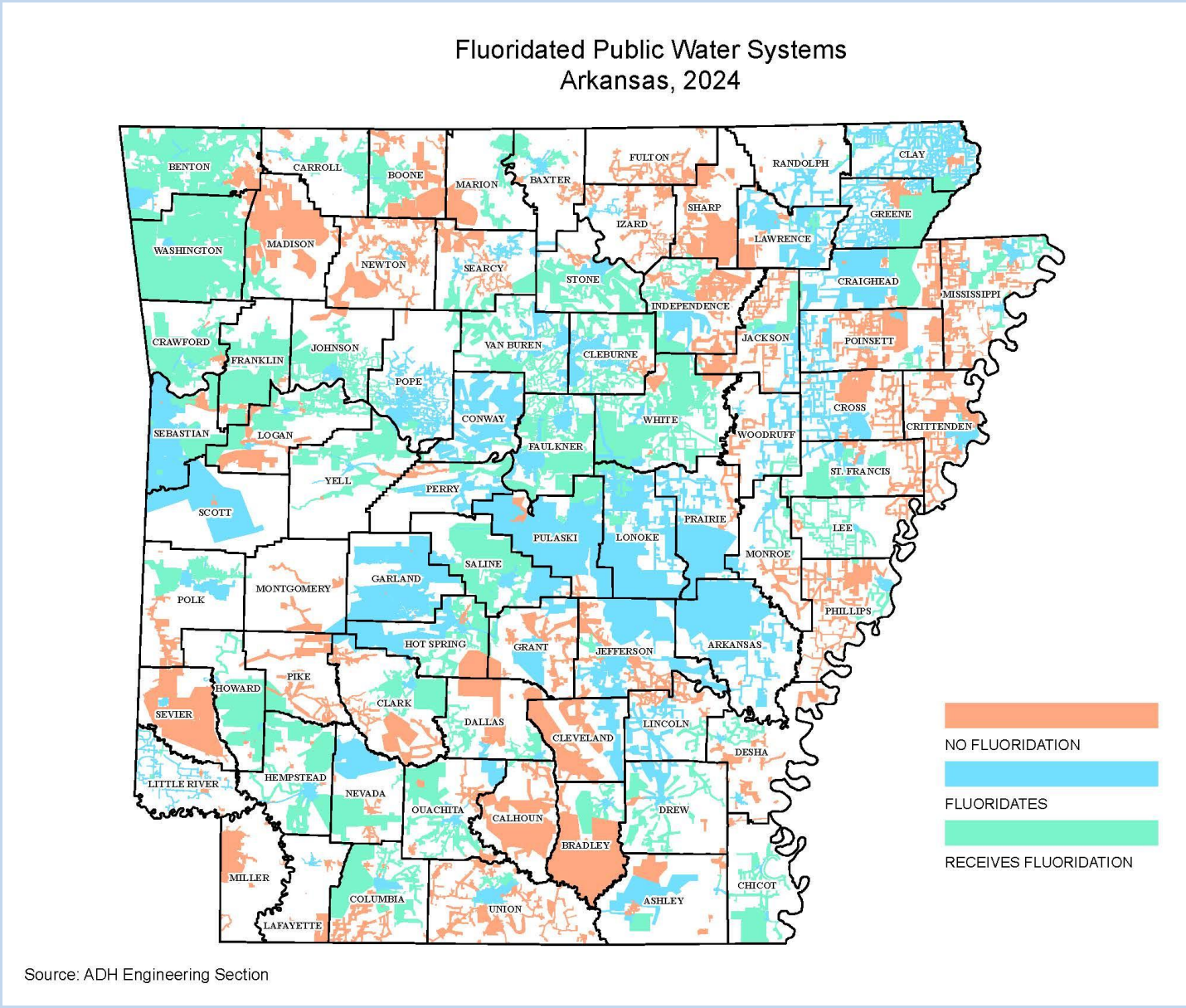


SOURCE: ARKANSAS STATE BOARD OF DENTAL EXAMINERS LICENSURE LISTS

COMMUNITY WATER FLUORIDATION

ACCESS THROUGHOUT THE STATE

About 86% of the state population is served by water systems with fluoridated water, which helps prevent tooth decay. Water systems are monitored monthly for optimum fluoride levels, defined as 0.7 milligrams per liter of water.



Source: ADH Engineering Section

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