

# Oral Health Data Deck 2022

Arkansas Trends & Prevalence

Center for Public Health Practice

*Chronic Disease Epidemiology Section – Office of Oral Health*



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Science Advisory Committee



# Introduction

What is Oral Health?

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Oral health is more than having healthy teeth – it is an integral part of the orofacial system that affects overall health.

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

Anatomically, oral health involves teeth, gums, hard and soft palate, lining of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws.

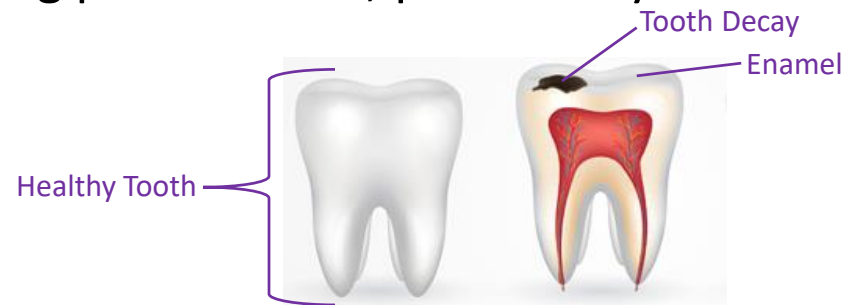


# Oral Health Diseases: Tooth Decay

**Tooth decay (caries or cavities)** is the breaking down of the **enamel** (outer layer of teeth) caused by bacteria that make acid that comes from eating or drinking. Any food or drink other than water changes the acidity level of the mouth. Sugar decreases pH, increasing acidity quickly making the mouth more susceptible to tooth decay. Additionally, the longer sugar is stuck to teeth, the longer bacteria act on sugars and produce acid thus leading to development of tooth decay.

While tooth decay is one of the most preventable diseases, it affects 97% of worldwide population and affects people of all ages. Tooth decay among young children under 5 years is known as **early childhood caries (ECC)**. The negative impact of this oral health disease almost doubles in socially disadvantaged children.

While the prevalence of tooth decay has declined among U.S. children, ECC continues to be a major health problem among preschoolers, particularly for socially disadvantaged groups.

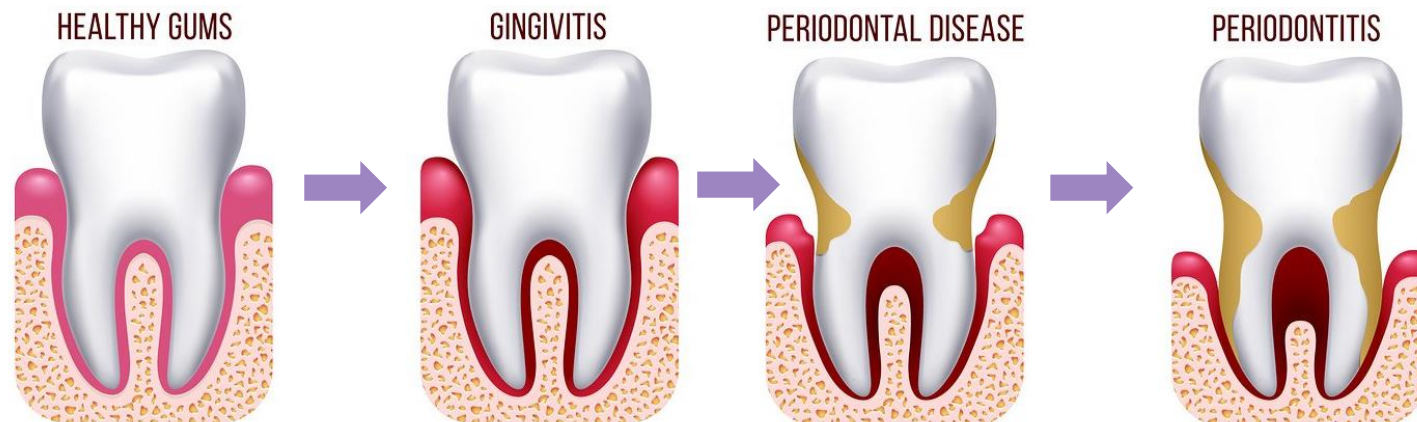


# Oral Health Diseases: Gum Disease

**Gum disease (Periodontal disease)** is a result of an infection of the tissues that surrounds and supports teeth. It is typically caused by plaque, a sticky film of bacteria that is continuously forming on teeth.

Early signs of gum disease is known as **gingivitis**, where gums are red, swollen and may bleed.

If left untreated, the condition can worsen and develop to a more severe form known as **periodontitis**. At this stage, the gums pull away from the tooth, bone can be lost, and teeth may loosen and fall out. It is more common among adults but continues to be a major threat to oral health along with tooth decay.



# Other Oral Health Diseases and Conditions

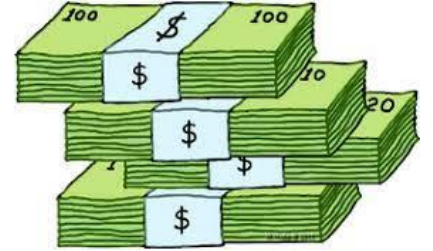
**Oro-facial Birth Defects** – A cleft palate (roof of the mouth) or cleft lip defect occurs early in pregnancy and causes an opening or fissure in the lip or palate. These defects cause problems with malformation of teeth, speaking, eating, and hearing, as well as difficulties with teeth.

**Oral Cancers** – Oral cavity and pharynx cancers (lip, tongue, salivary gland, floor of mouth, gum, nasopharynx, tonsil, oropharynx, hypopharynx, and other mouth parts) are most common among older adults who are tobacco users and heavy drinkers. Additionally, individuals undergoing chemotherapy may also suffer from oral conditions such as mouth ulcers, impaired taste, and dry mouth.

**Chronic Diseases** – Individuals with a diagnosed chronic disease (such as arthritis, heart disease, stroke, obesity or diabetes) may have a higher risk for missing teeth and poor oral health. Individuals with weakened immune systems or taking certain medications have an increased risk for some oral problems. Additionally, chronic diseases such as jaw joint disease and osteoporosis compromises oral health function and is more often commonly among females.



# Common Oral Health Disparities



Oral health disparities exist among communities with no access to community fluoridated water, School-Based Sealant programs, healthy foods, or transportation for dental appointments.

Additionally, a major contributing factor of oral health disparity is a lack of dental insurance, which reduces the ability to receive dental preventive services.

In the U.S., dental care has the highest level of financial barriers among health care services, with the lack of dental insurance a major financial factor. High dental costs are much more limiting to dental care access than non-financial factors, such as fear of dentist or difficulty finding an appointment time. While this applies to all age groups and income levels, low-income communities face the most significant cost barriers to dental care.

Adult dental coverage varies across the states and, unfortunately, Medicaid and Medicare are not required to provide dental benefits to adults.



# What Does it Mean to Have Good Oral Health?

Beyond being free from tooth decay and gum disease, good oral health means being free from chronic oral pain and other conditions that affect the mouth and throat.

It means having the ability to perform basic human functions through the orofacial system, including:

**Ability to Chew**



**Ability to Swallow**



**Ability to Speak**



**Ability to express yourself!**



# Best Oral Health Practices for Good Oral Health

The following methods are collectively effective in combating oral health related diseases:

- Routine tooth brushing and flossing (floss once a day, brush twice a day)
- Routine dental visits for dental care (every 6 months)
- Drinking fluoridated water
- Application of topical fluoride varnish
- Application of dental sealants
- Limit/avoid intake of sticky, starchy, sugary foods
- Avoid tobacco and alcohol



# Purpose of the Oral Health Data Deck

The purpose of the Oral Health Data Deck is to provide a comprehensive set of graphs and charts on the impacts of oral health preventative practices and risk factors. This project provides oral health-related data to program staff, organizations, and the public. The charts and graphs can be copied for use in other presentations or reports.

Unless otherwise indicated, the error bars on the graphs represent the 95% Confidence Intervals (CI). Confidence intervals are a way to quantify the certainty and variation in the data and/or random fluctuations over time or between groups. If the error bars for the 95% confidence intervals on the graph do not overlap, then the difference is considered statistically significant at the  $p < 0.05$  level of significance.



# Data Sources Used for Oral Health Data Deck

## National Level Data

Section I	<a href="#"><u>Behavioral Risk Factor Surveillance System (BRFSS)</u></a>
Section II	<a href="#"><u>Youth Risk Behavior Surveillance System (YRBSS)</u></a>
Section III	<a href="#"><u>National Survey of Children's Health (NSCH)</u></a>

## State Level Data

Section IV	<a href="#"><u>Pregnancy Risk Assessment Monitoring System (PRAMS)</u></a>
Section V	<a href="#"><u>Arkansas Basic Screening Survey (ArBSS)</u></a>
Section VI	<a href="#"><u>Arkansas Cancer Registry Query System</u></a>
Section VII	<a href="#"><u>Dental Health Professionals in Arkansas</u></a>
Section VIII	<a href="#"><u>School-Based Sealant Partners</u></a>
Section IX	<a href="#"><u>Community Water Fluoridation</u></a>
Section X	<a href="#"><u>Paint A Smile Program (PAS)</u></a>



# National Level Oral Health Data

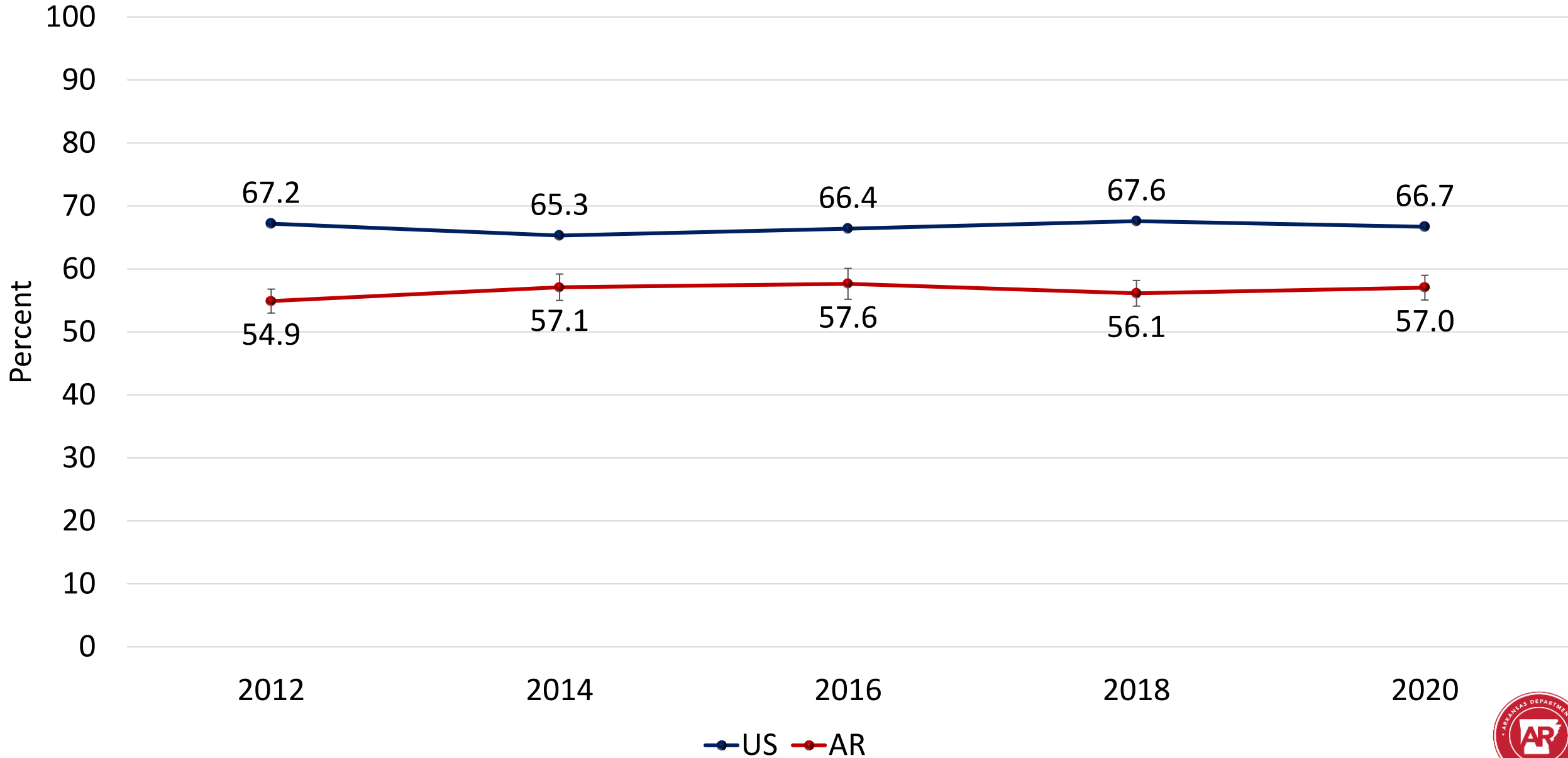
# Behavioral Risk Factor Surveillance System

Section I

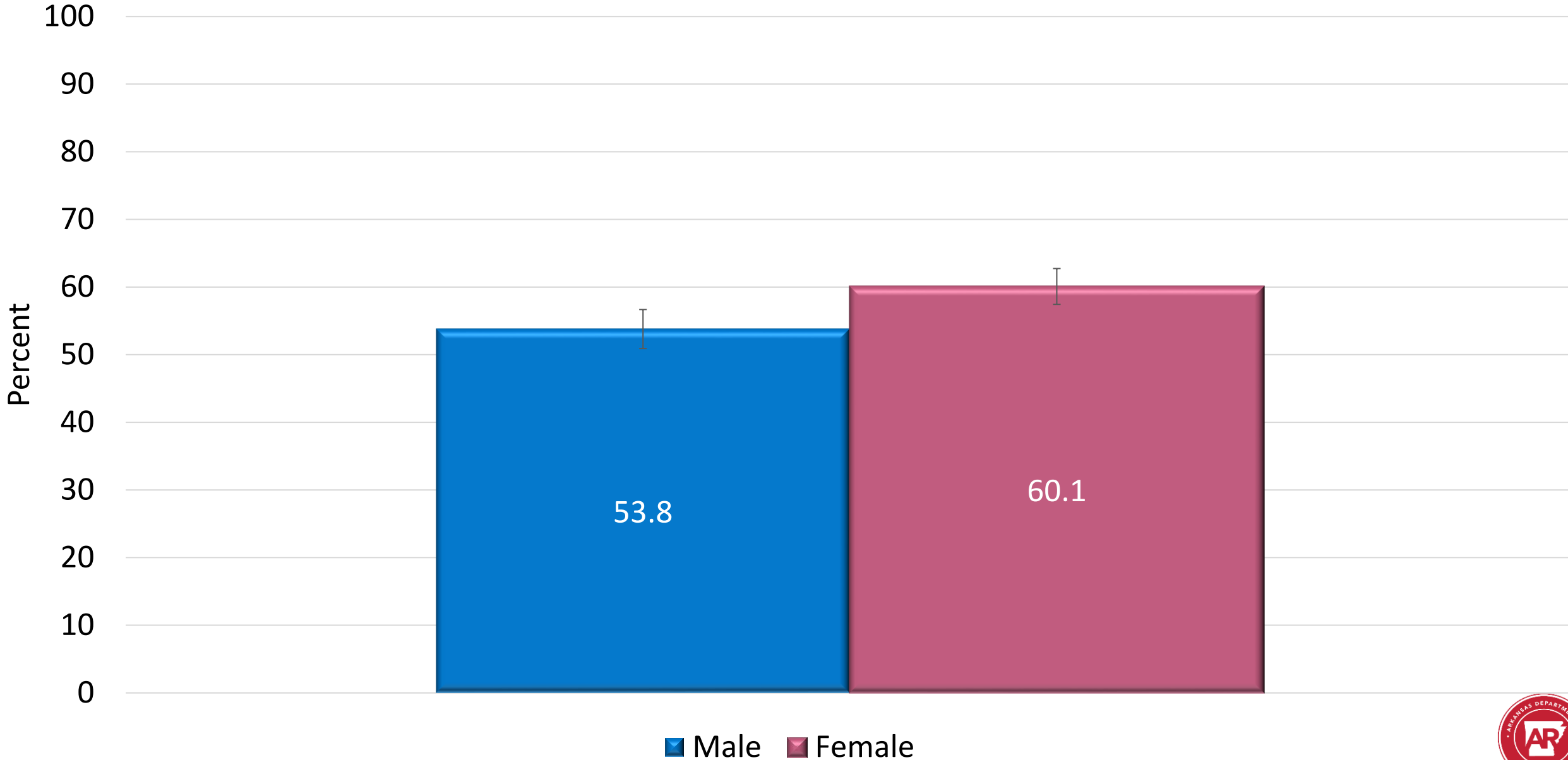
BRFSS 2012, 2014, 2016, 2018, 2020



# Adults that Visited the Dentist or Dental Clinic within the Past Year United States and Arkansas, 2012 – 2020



# Adults that Visited the Dentist or Dental Clinic within the Past Year by Gender, Arkansas, 2020

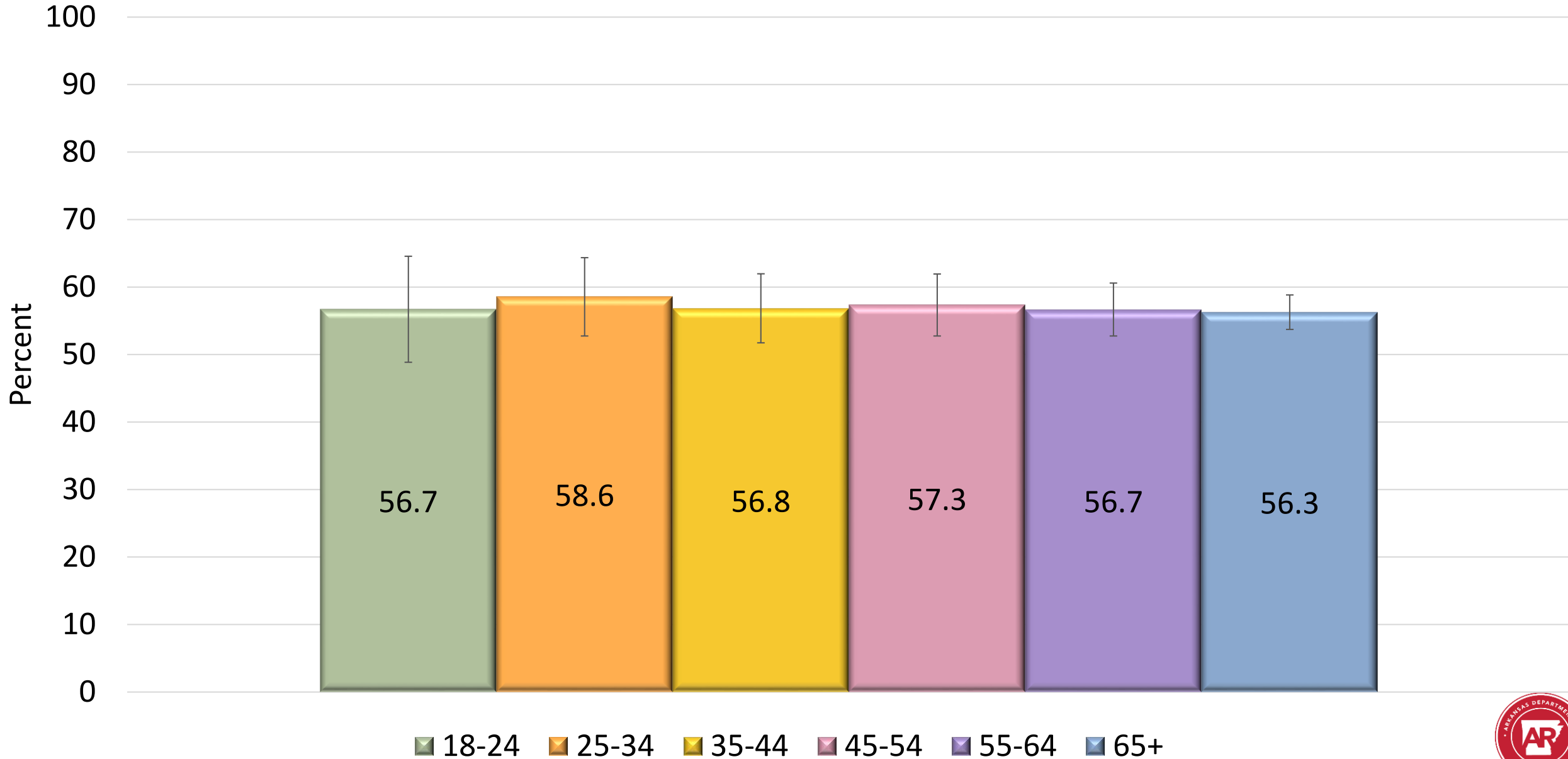


Source: BRFSS

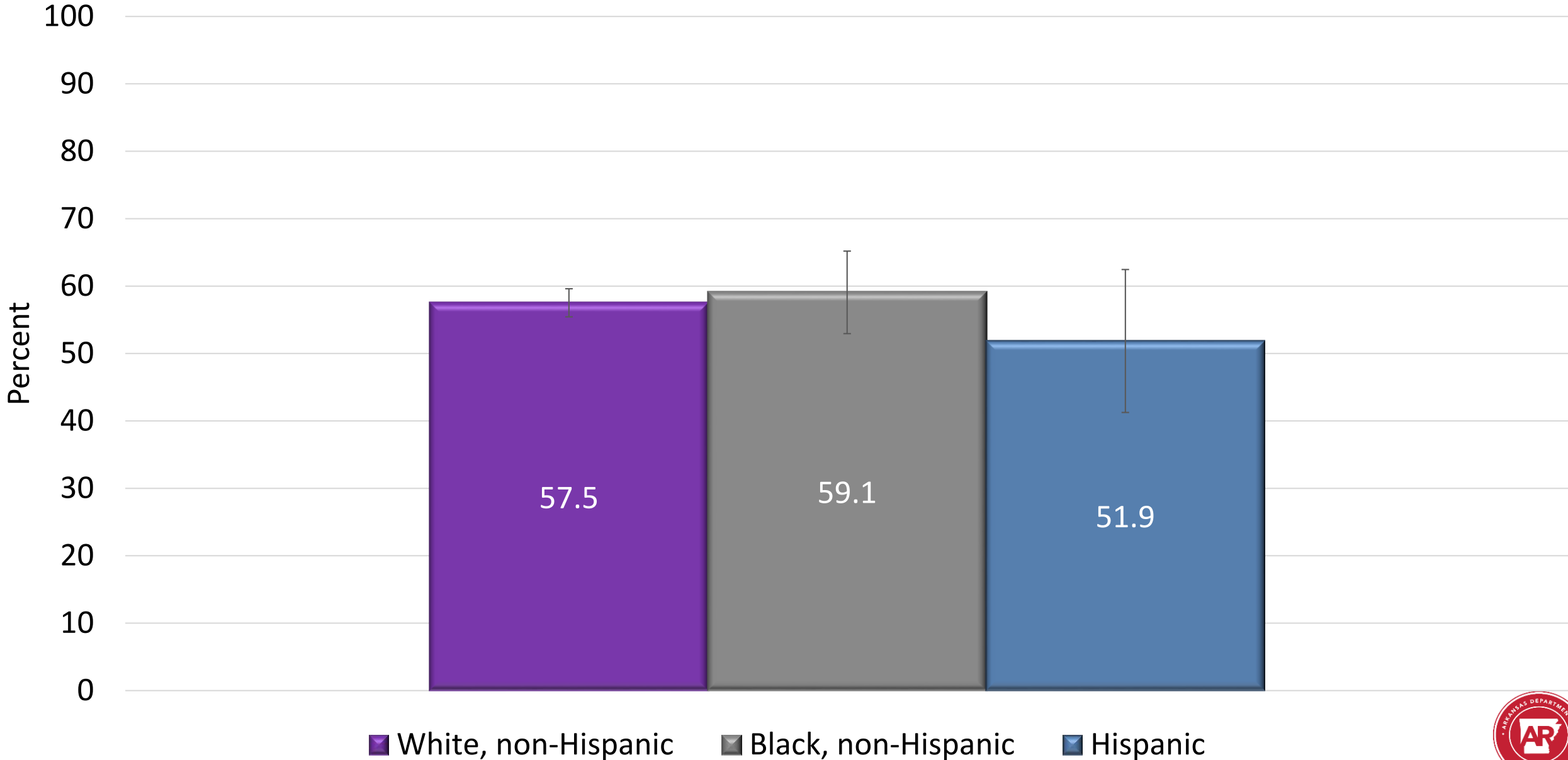




# Adults that Visited the Dentist or Dental Clinic within the Past Year by Age Group, Arkansas, 2020



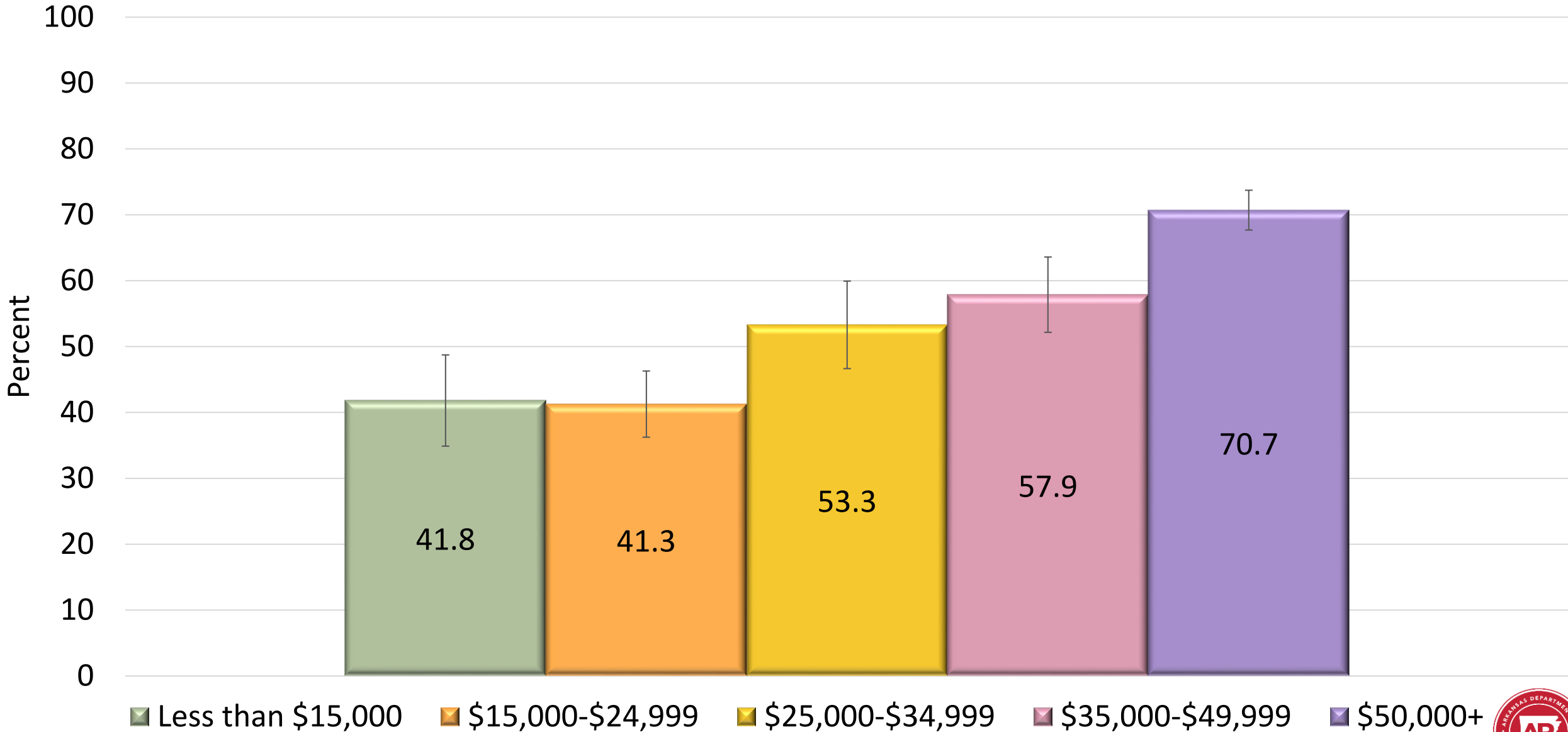
# Adults that Visited the Dentist or Dental Clinic within the Past Year by Race/Ethnicity, Arkansas, 2020



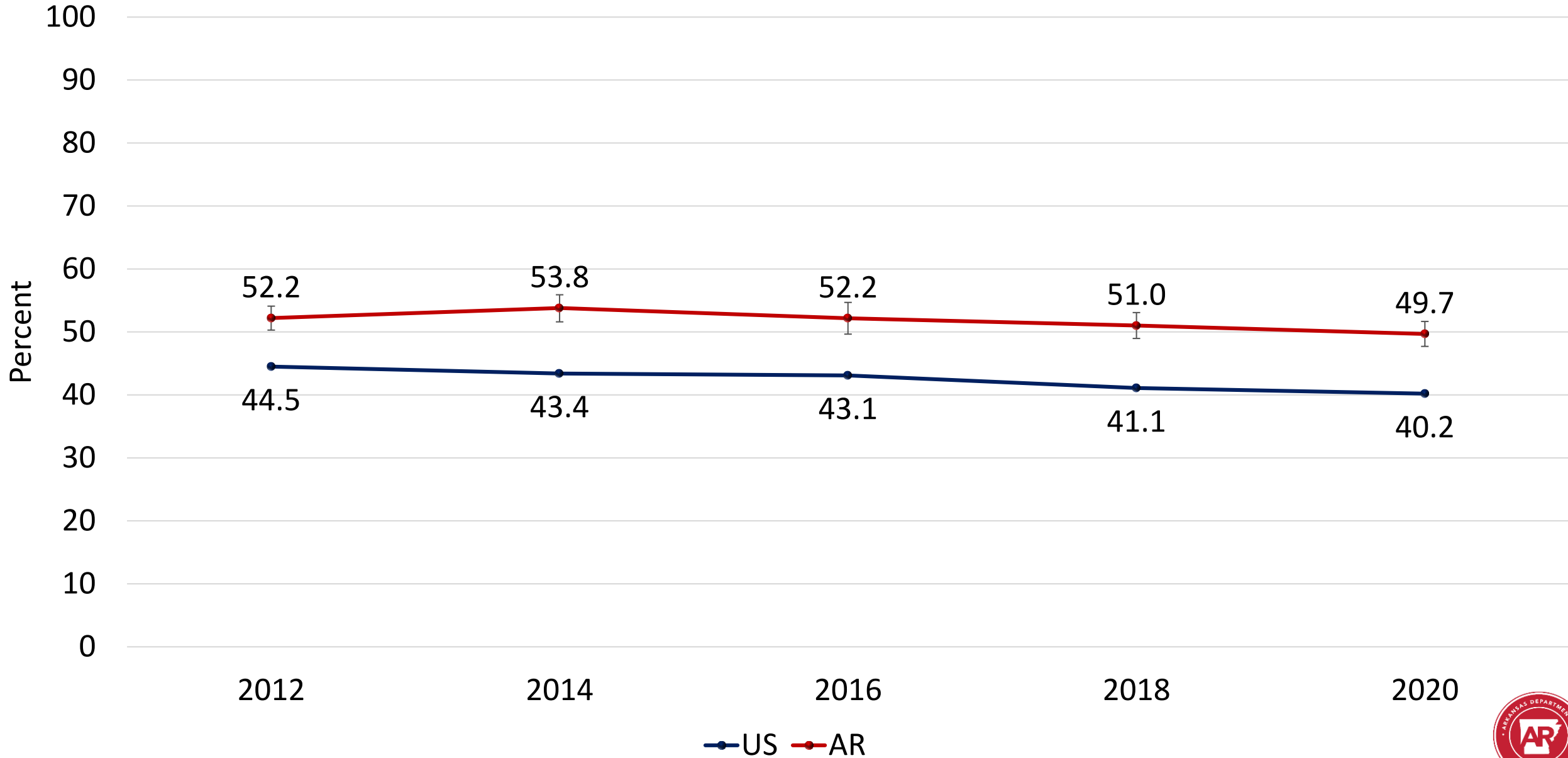
Source: BRFSS



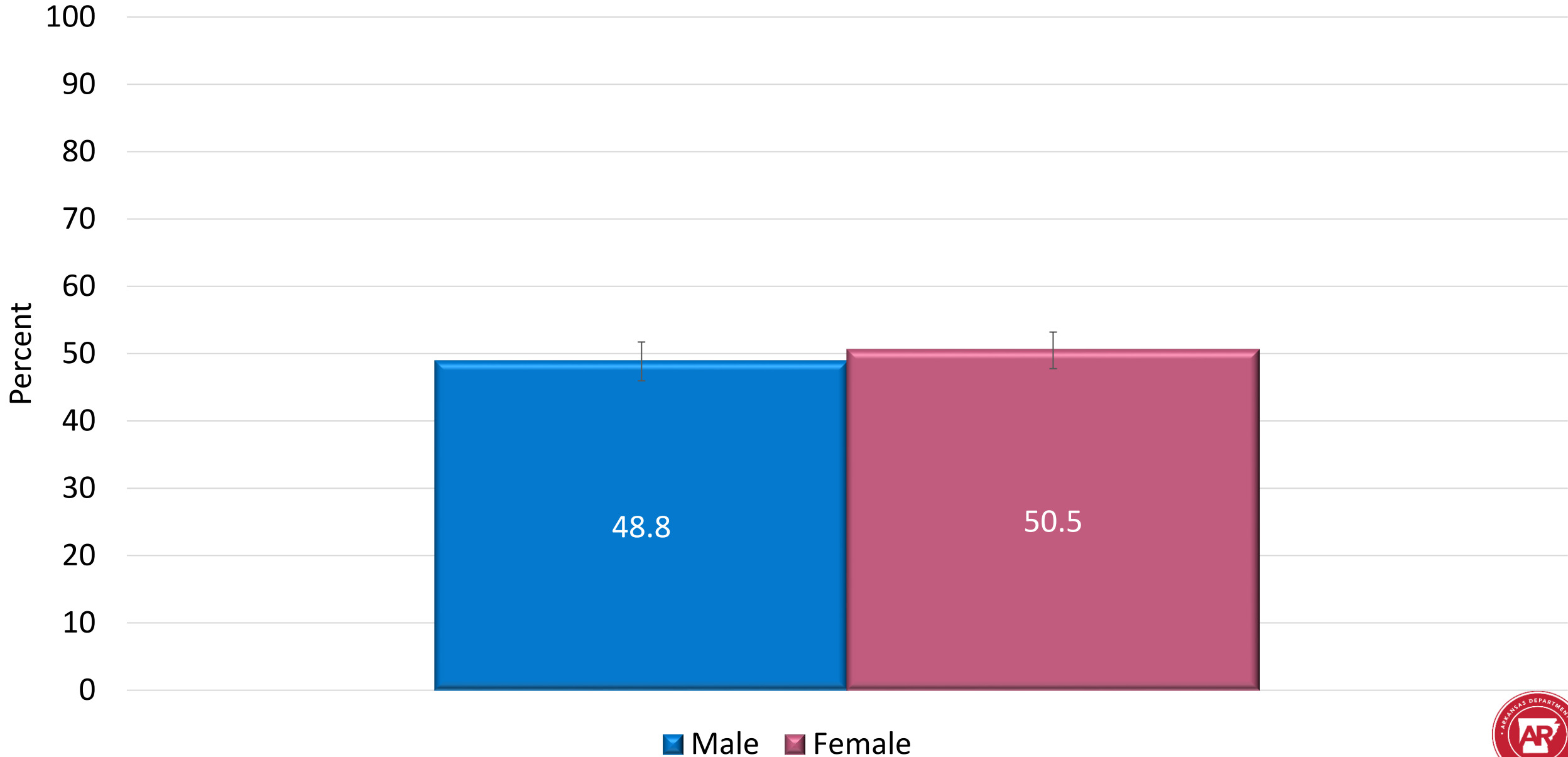
# Adults that Visited the Dentist or Dental Clinic within the Past Year by Household Income, Arkansas, 2020



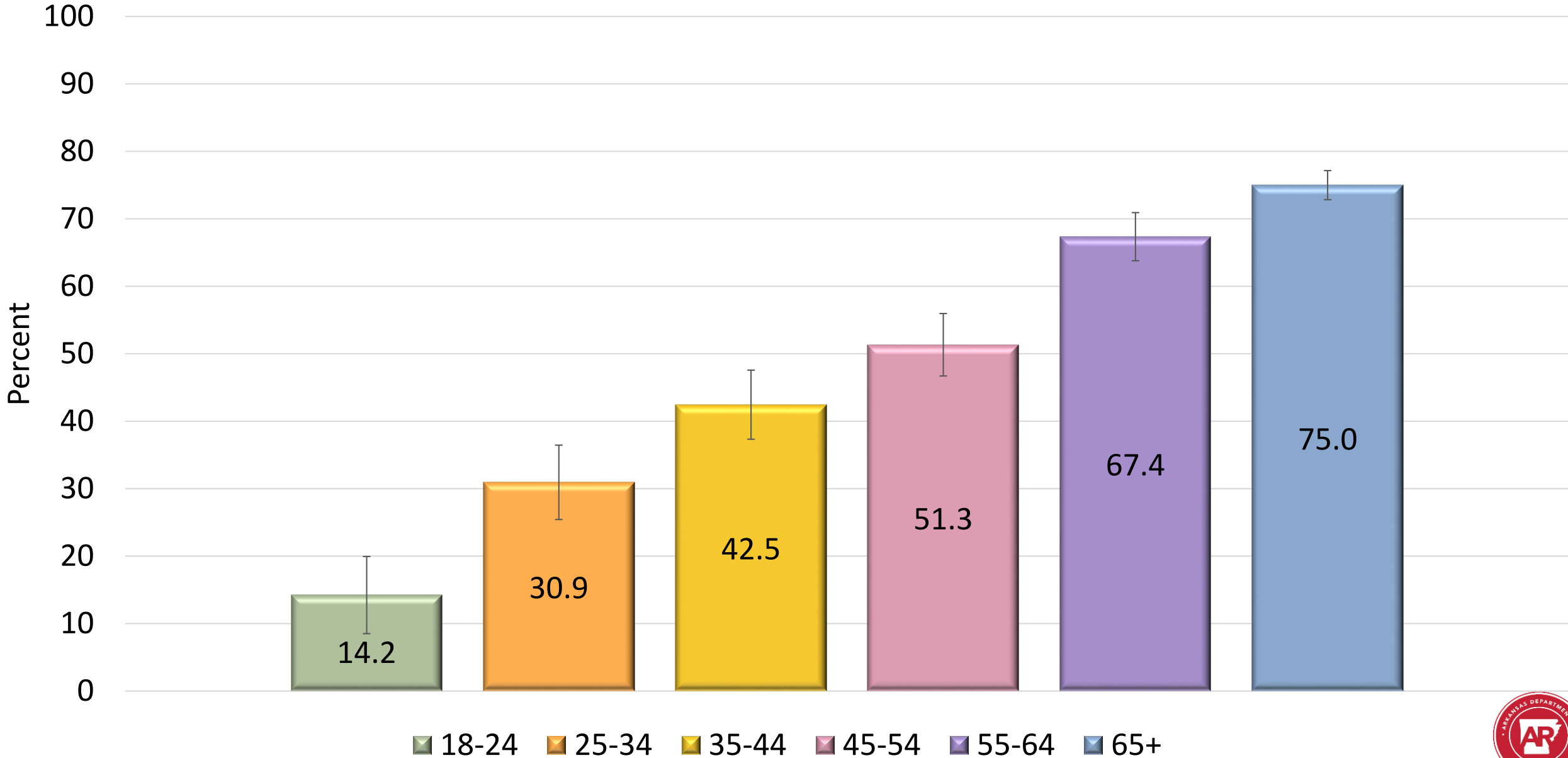
# Adults that have had Any Permanent Teeth Extracted United States and Arkansas, 2012 – 2020



# Adults that have had Any Permanent Teeth Extracted by Gender, Arkansas, 2020



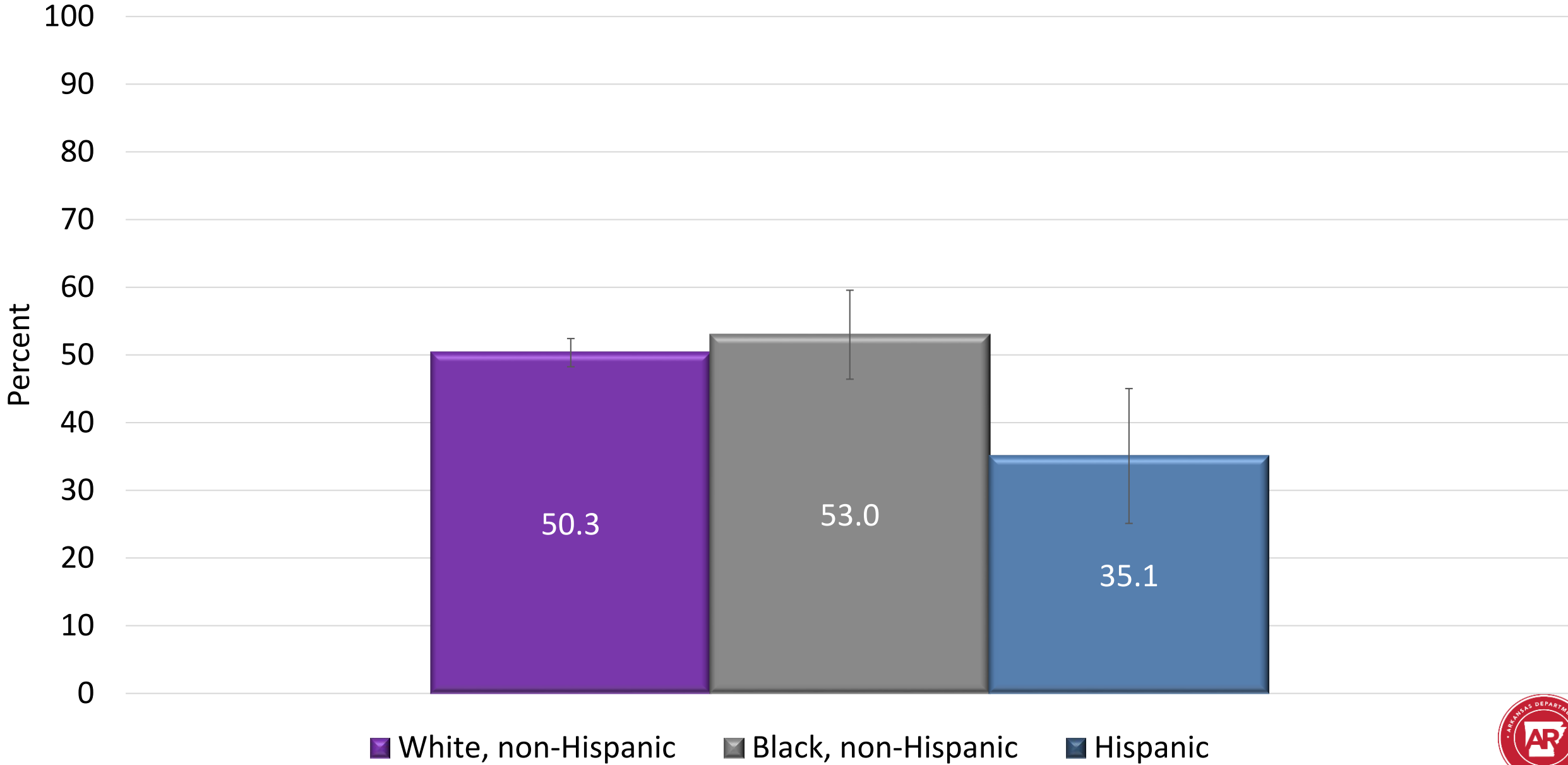
# Adults that have had Any Permanent Teeth Extracted by Age Group, Arkansas, 2020



Source: BRFSS



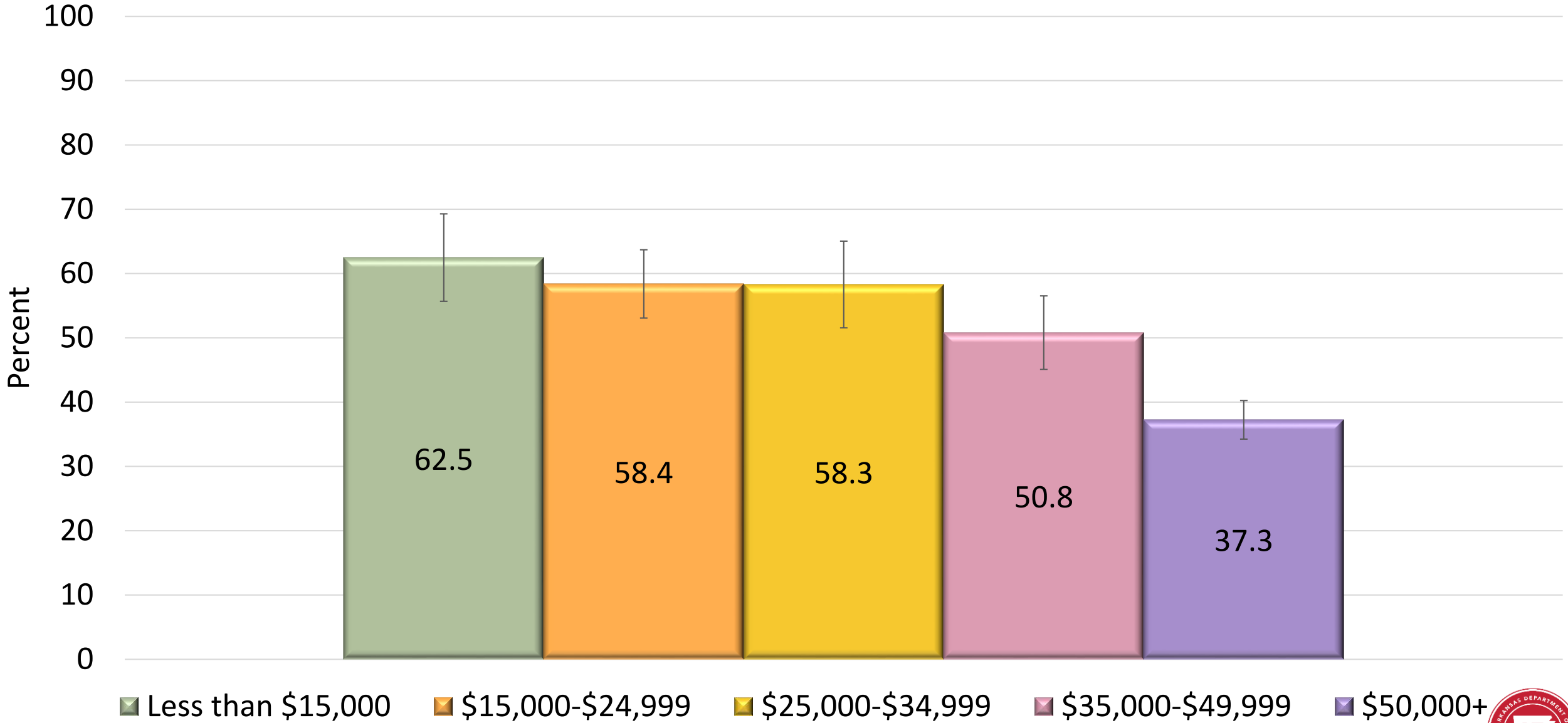
# Adults that have had Any Permanent Teeth Extracted by Race/Ethnicity, Arkansas, 2020



Source: BRFSS



# Adults that have had Any Permanent Teeth Extracted by Household Income, Arkansas, 2020

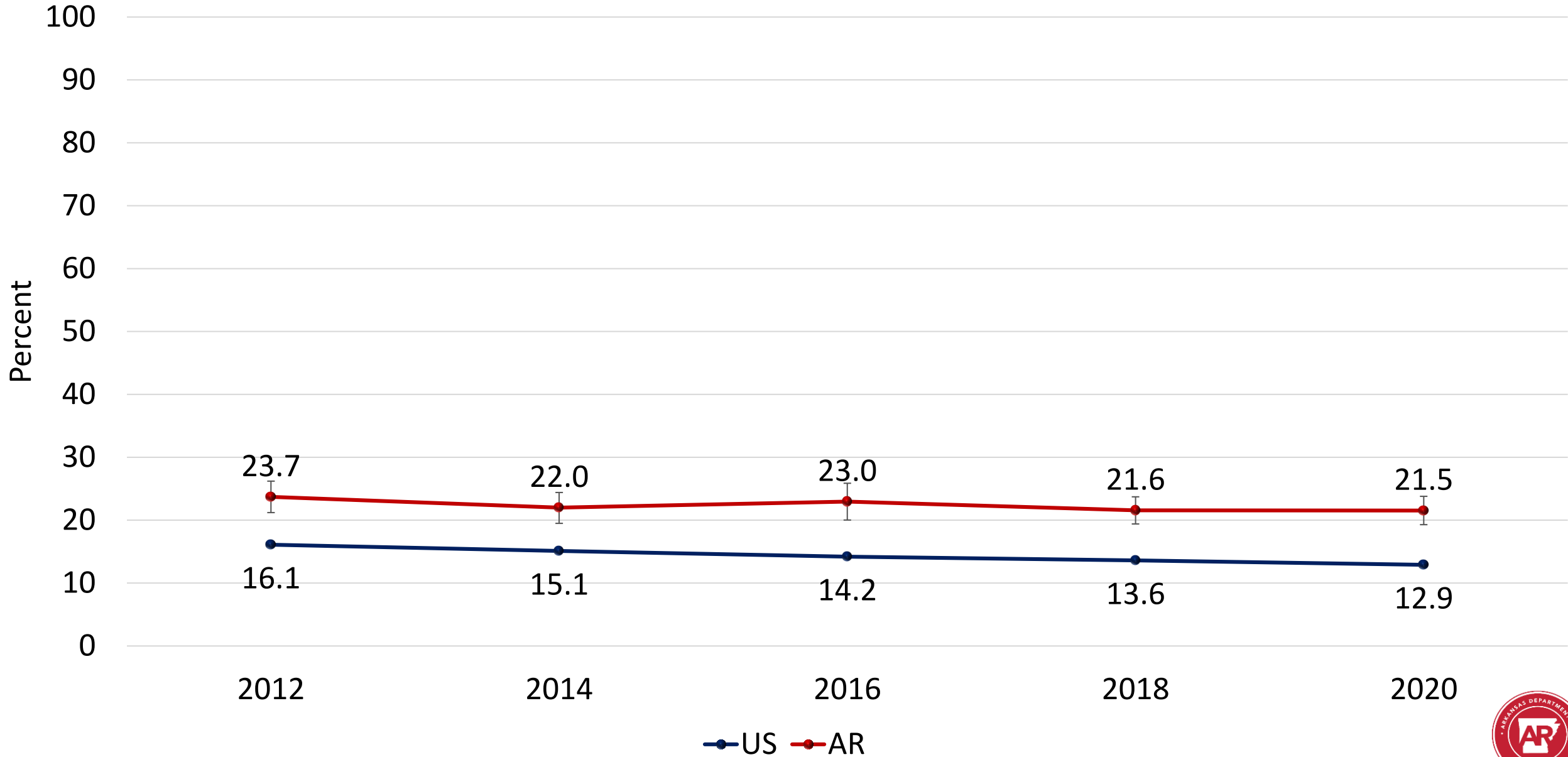


■ Less than \$15,000   ■ \$15,000-\$24,999   ■ \$25,000-\$34,999   ■ \$35,000-\$49,999   ■ \$50,000+

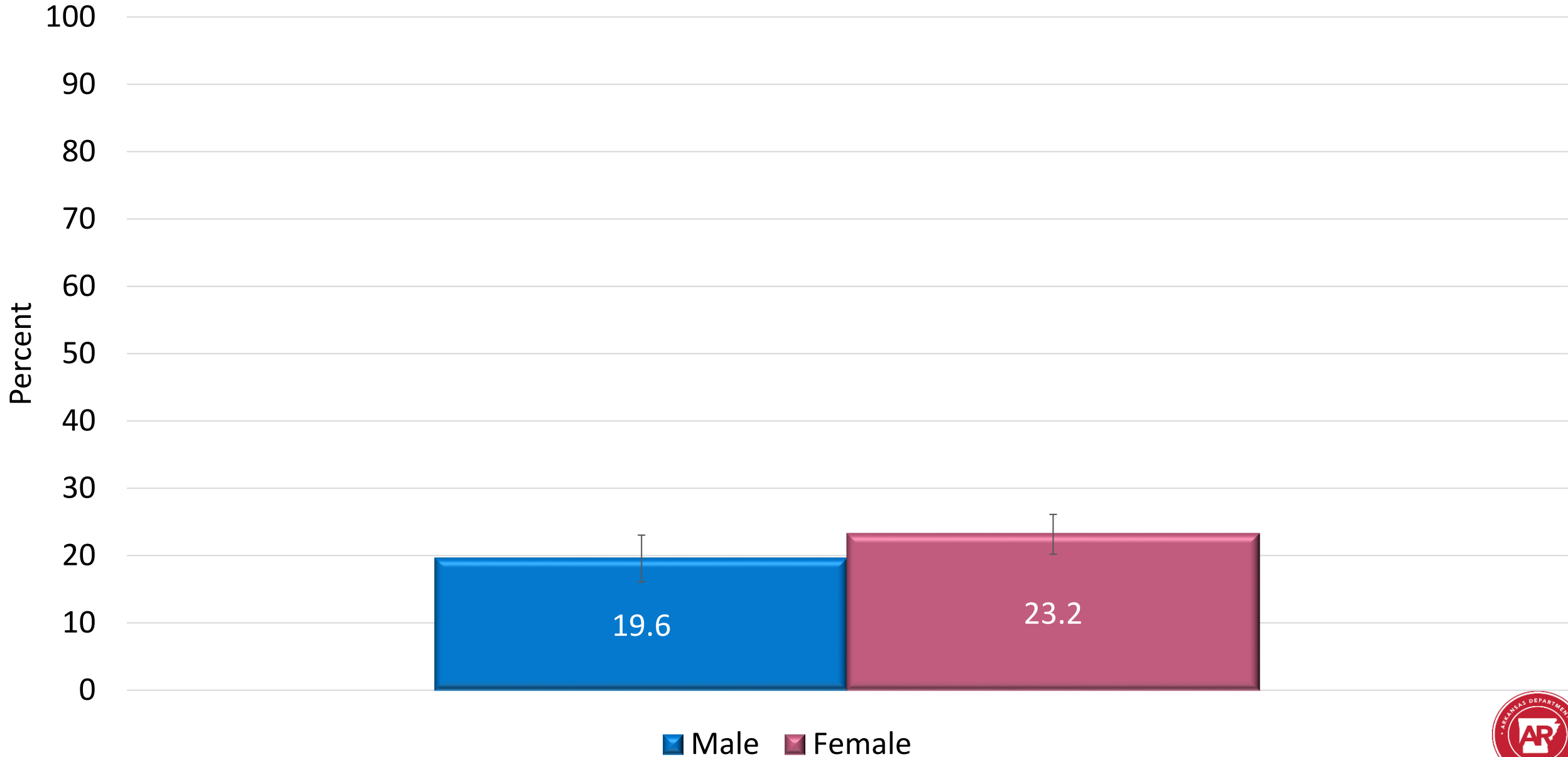




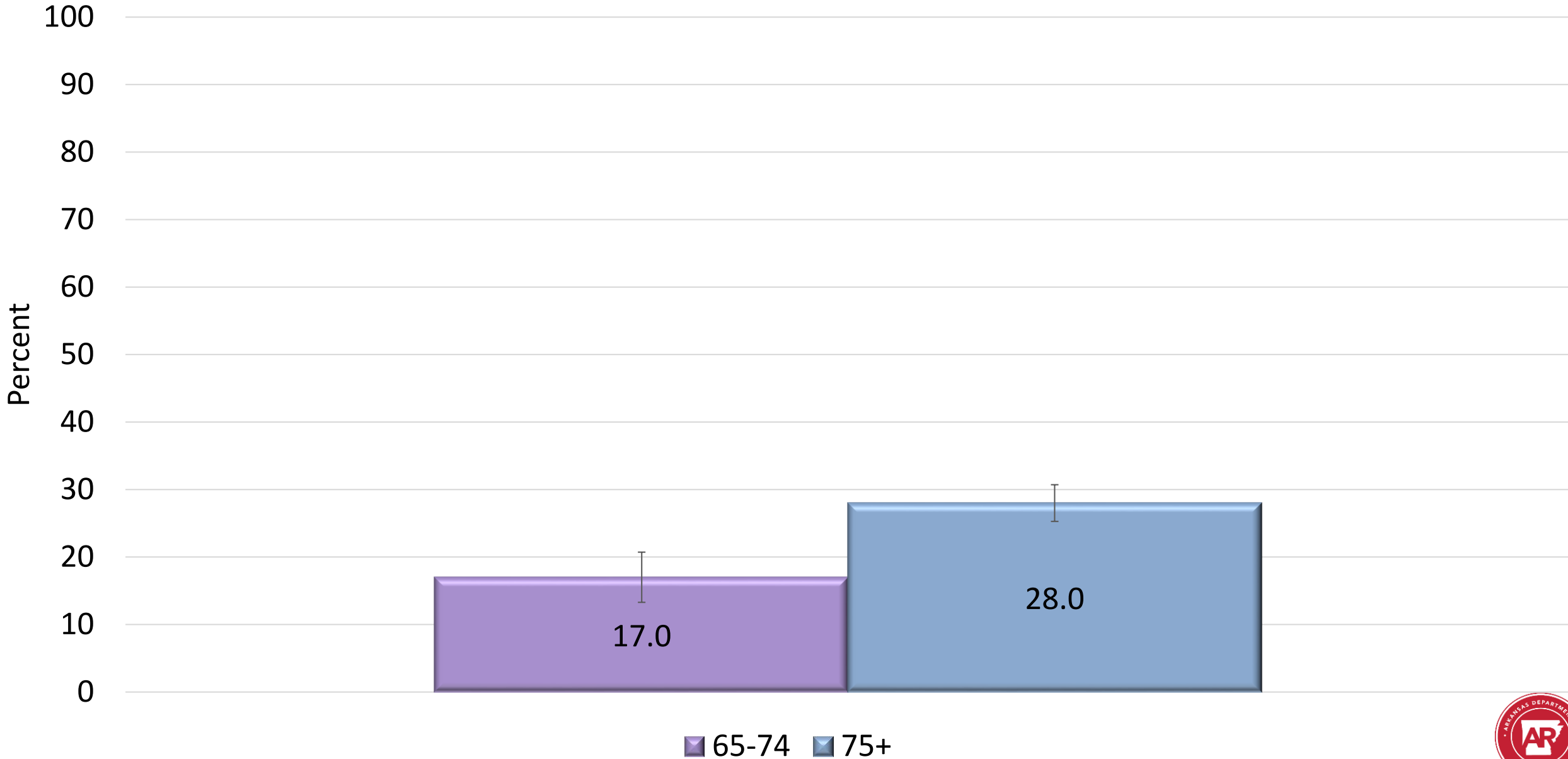
# Adults Aged 65+ with No Natural Teeth Present United States and Arkansas, 2012 – 2020



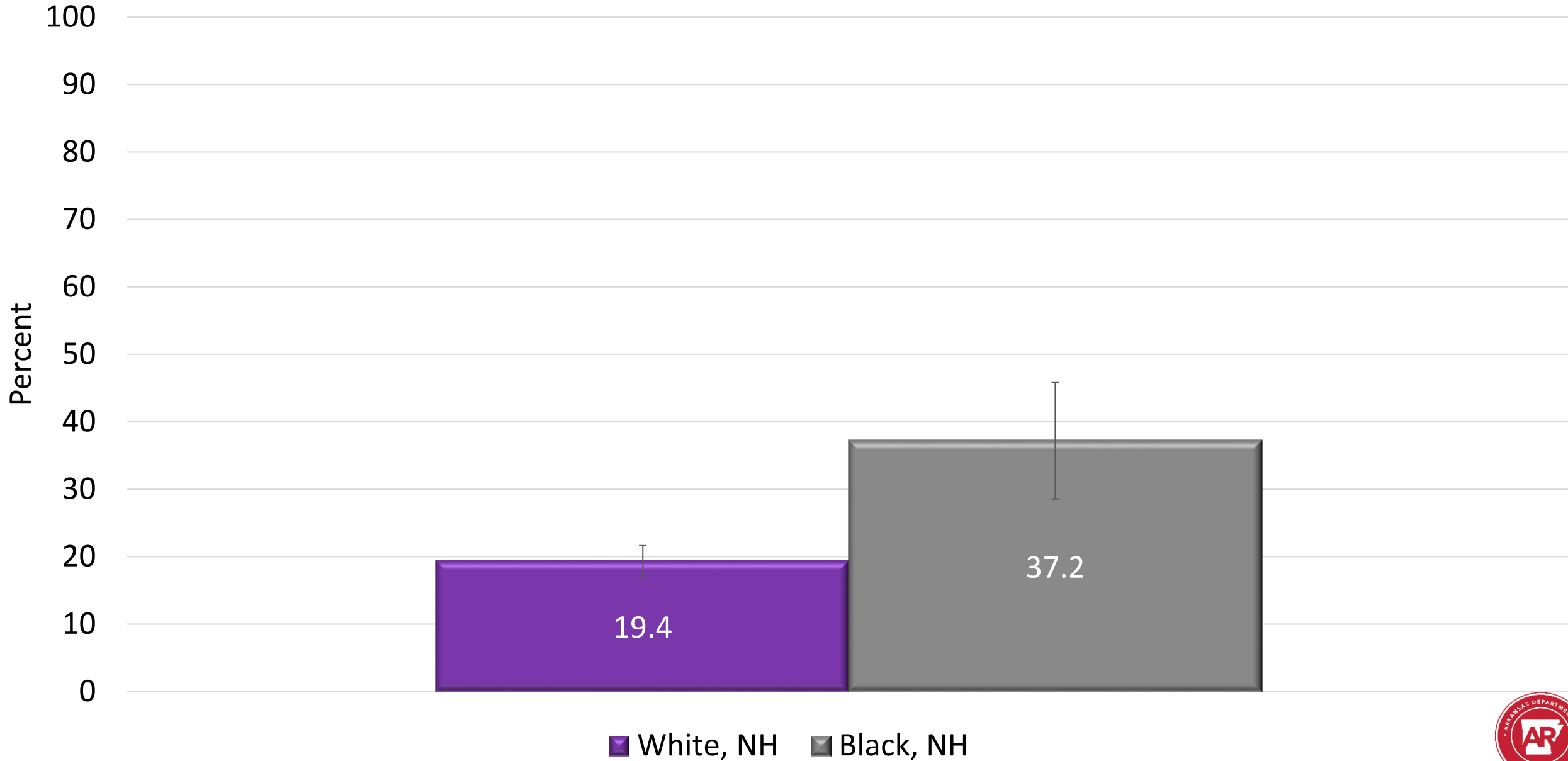
# Adults Aged 65+ with No Natural Teeth Present by Gender, Arkansas, 2020



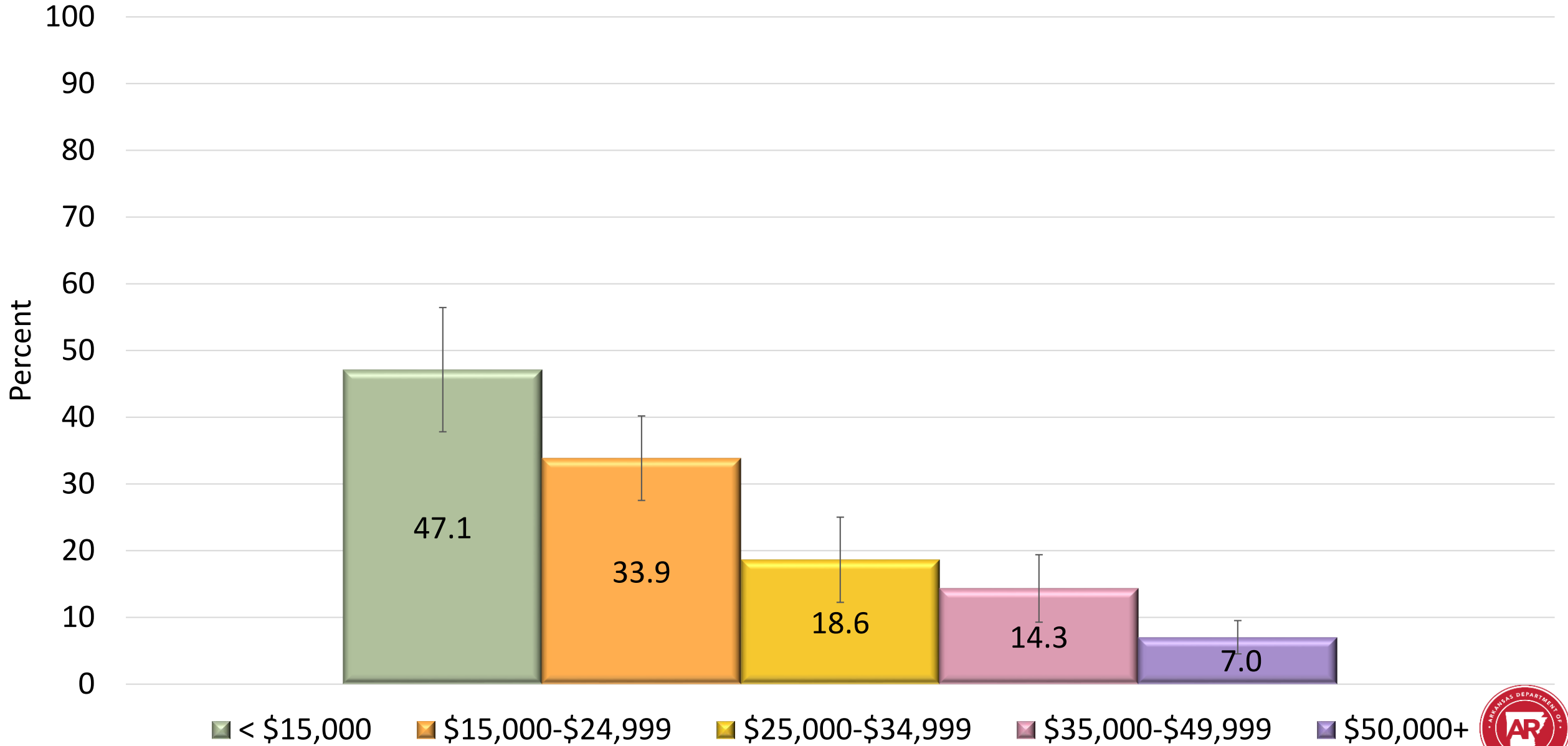
# Adults Aged 65+ with No Natural Teeth Present, by Age Group, Arkansas, 2020



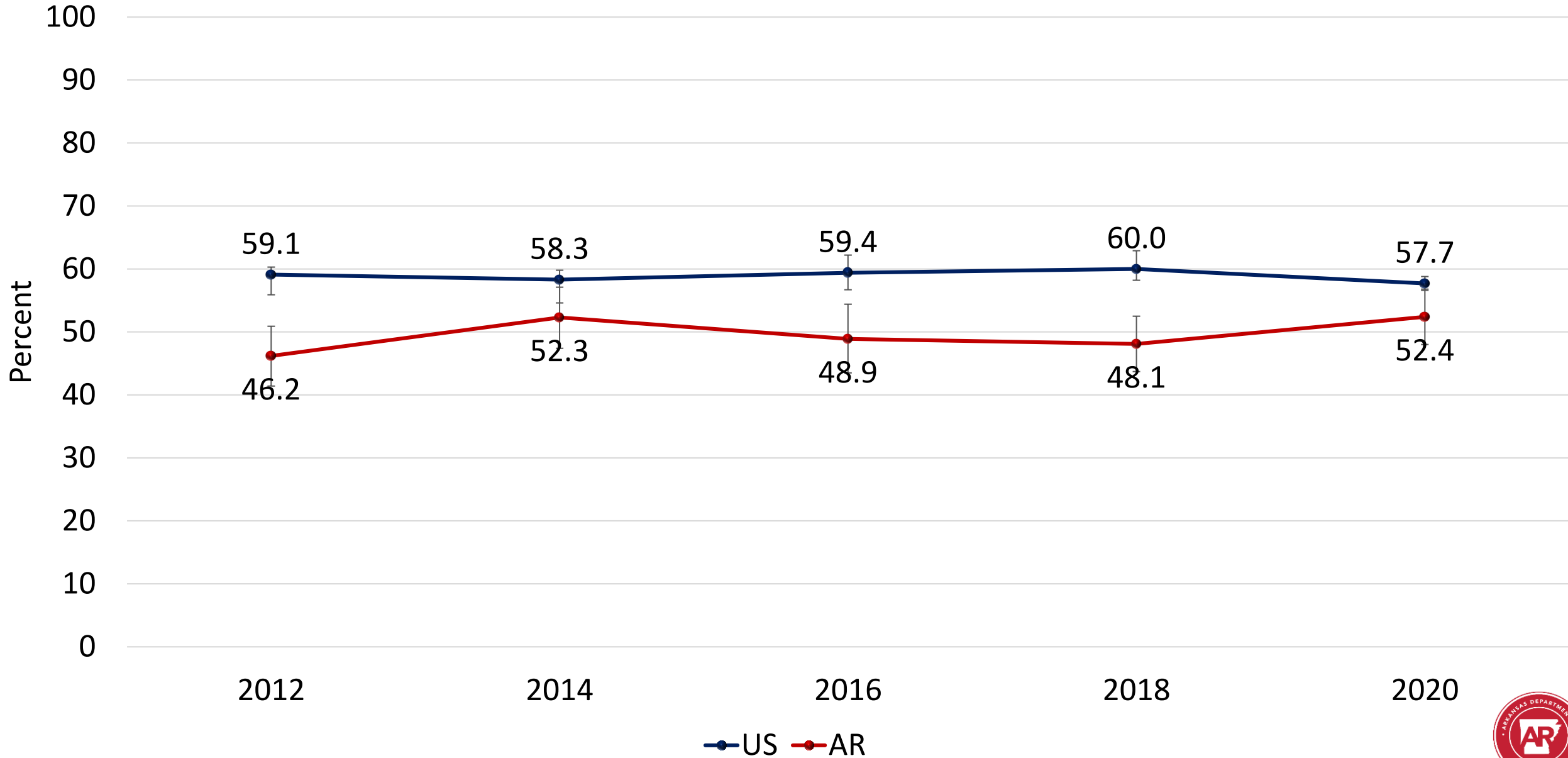
# Adults Aged 65+ with No Natural Teeth Present, by Race/Ethnicity, Arkansas, 2020



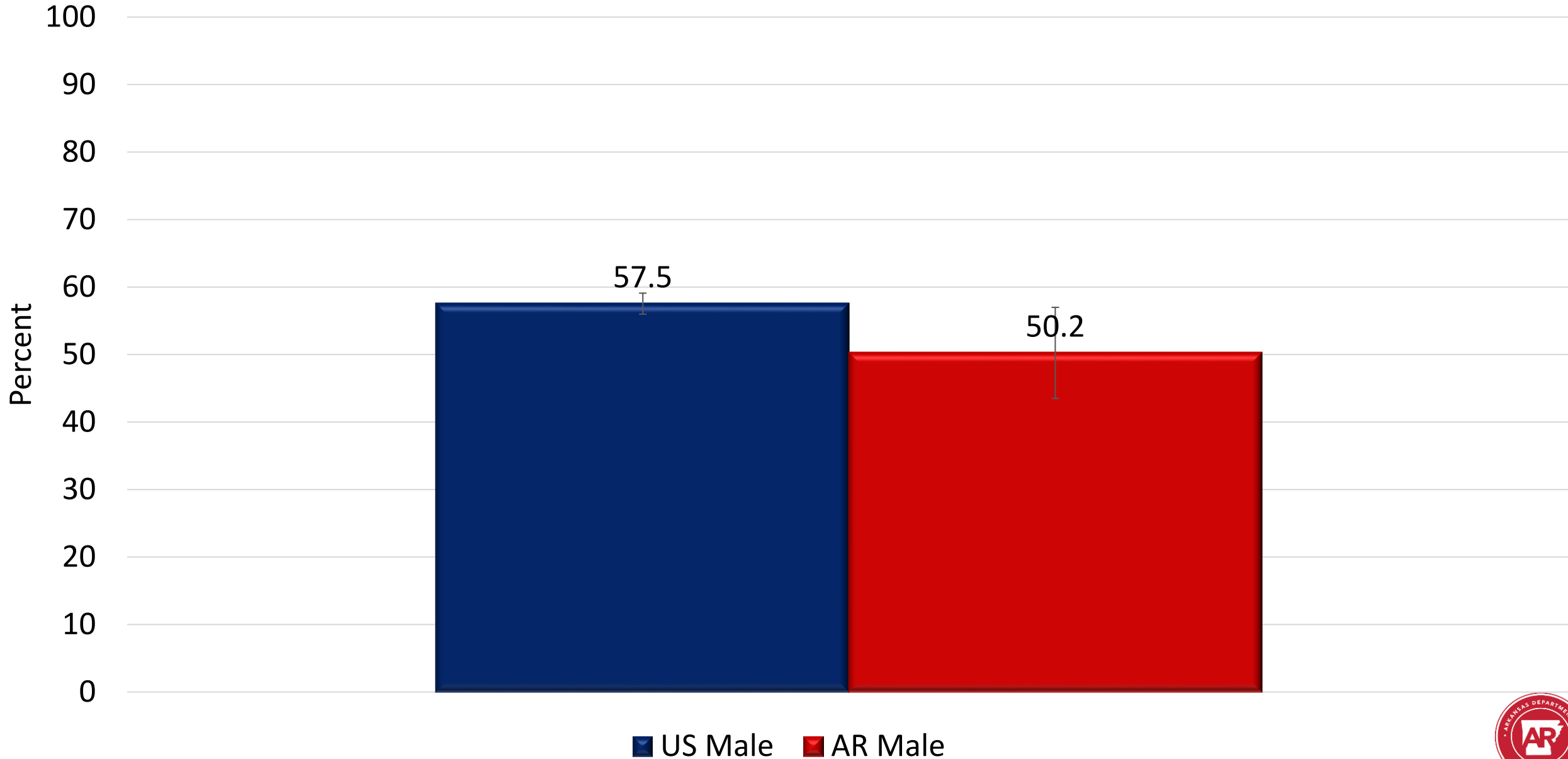
# Adults Aged 65+ with No Natural Teeth Present, by Household Income, Arkansas, 2020



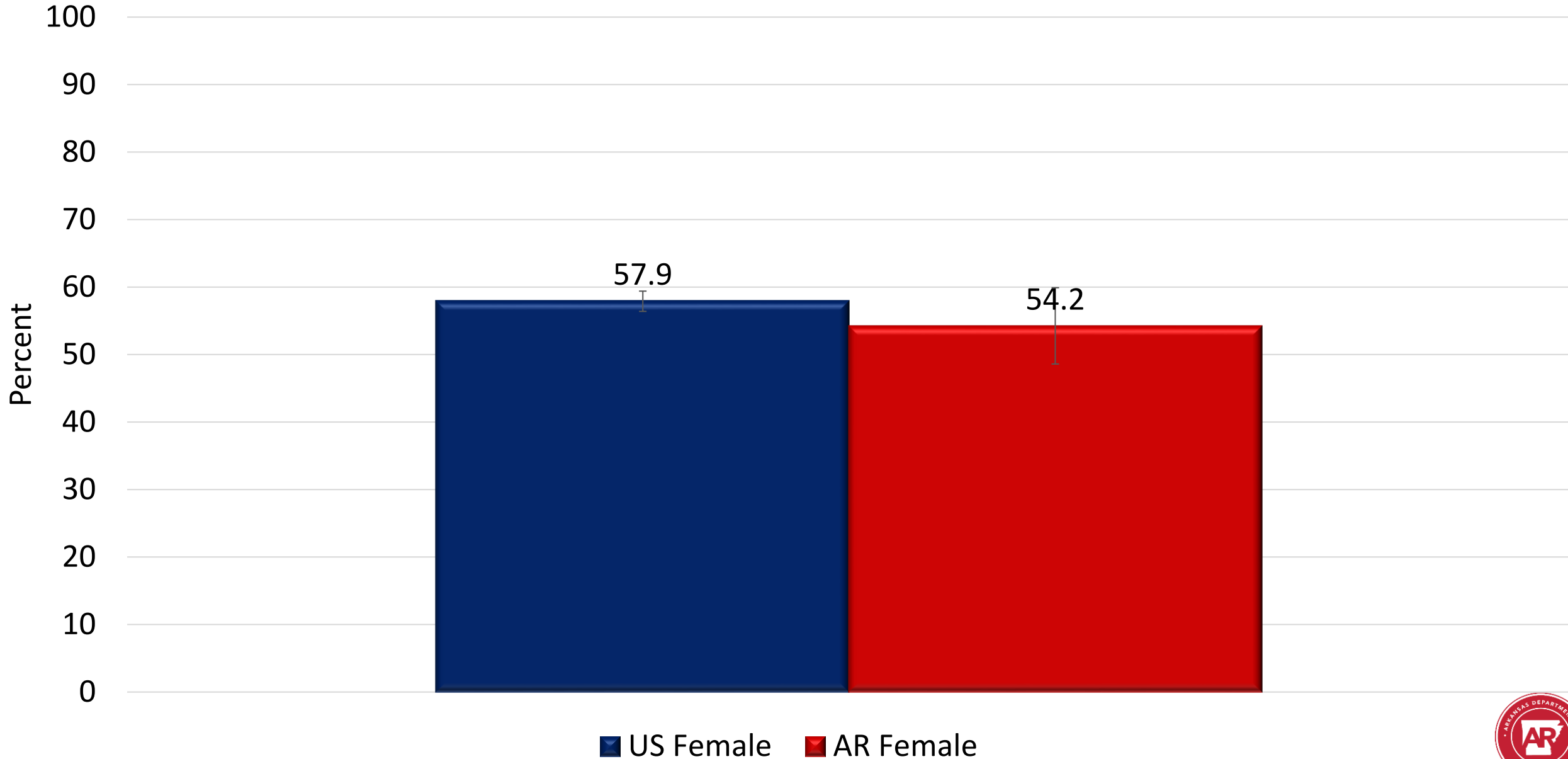
# Adults with Diabetes that Visited the Dentist or Dental Clinic within the Past Year, United States and Arkansas, 2012 – 2020



# Adults with Diabetes that Visited the Dentist or Dental Clinic within the Past Year, Males, United States and Arkansas, 2020

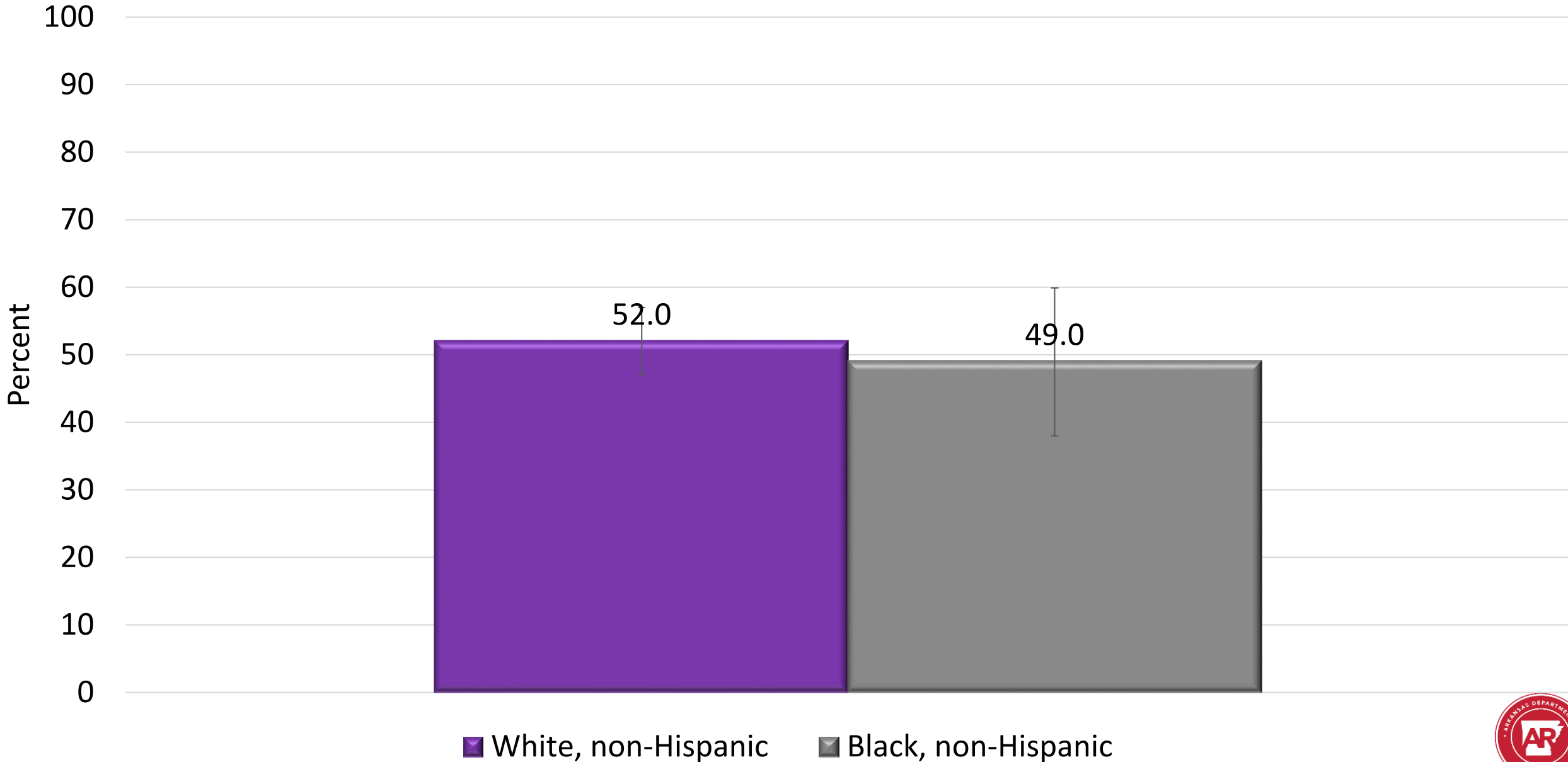


# Adults with Diabetes that Visited the Dentist or Dental Clinic within the Past Year, Females, United States and Arkansas, 2020





# Adults with Diabetes that Visited the Dentist or Dental Clinic within the Past Year, by Race/Ethnicity, Arkansas 2020



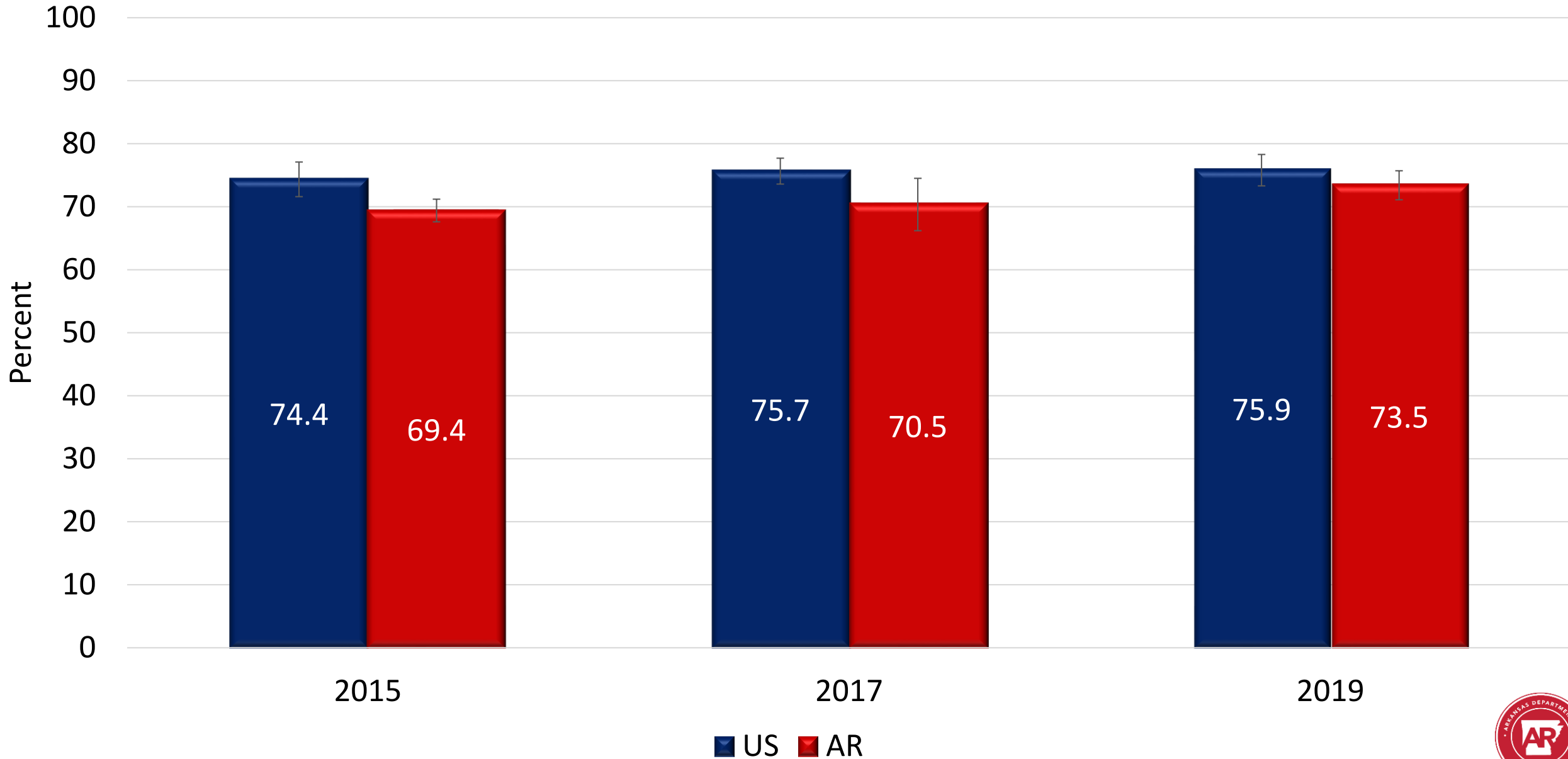
# Youth Risk Behavior Surveillance System

Section II

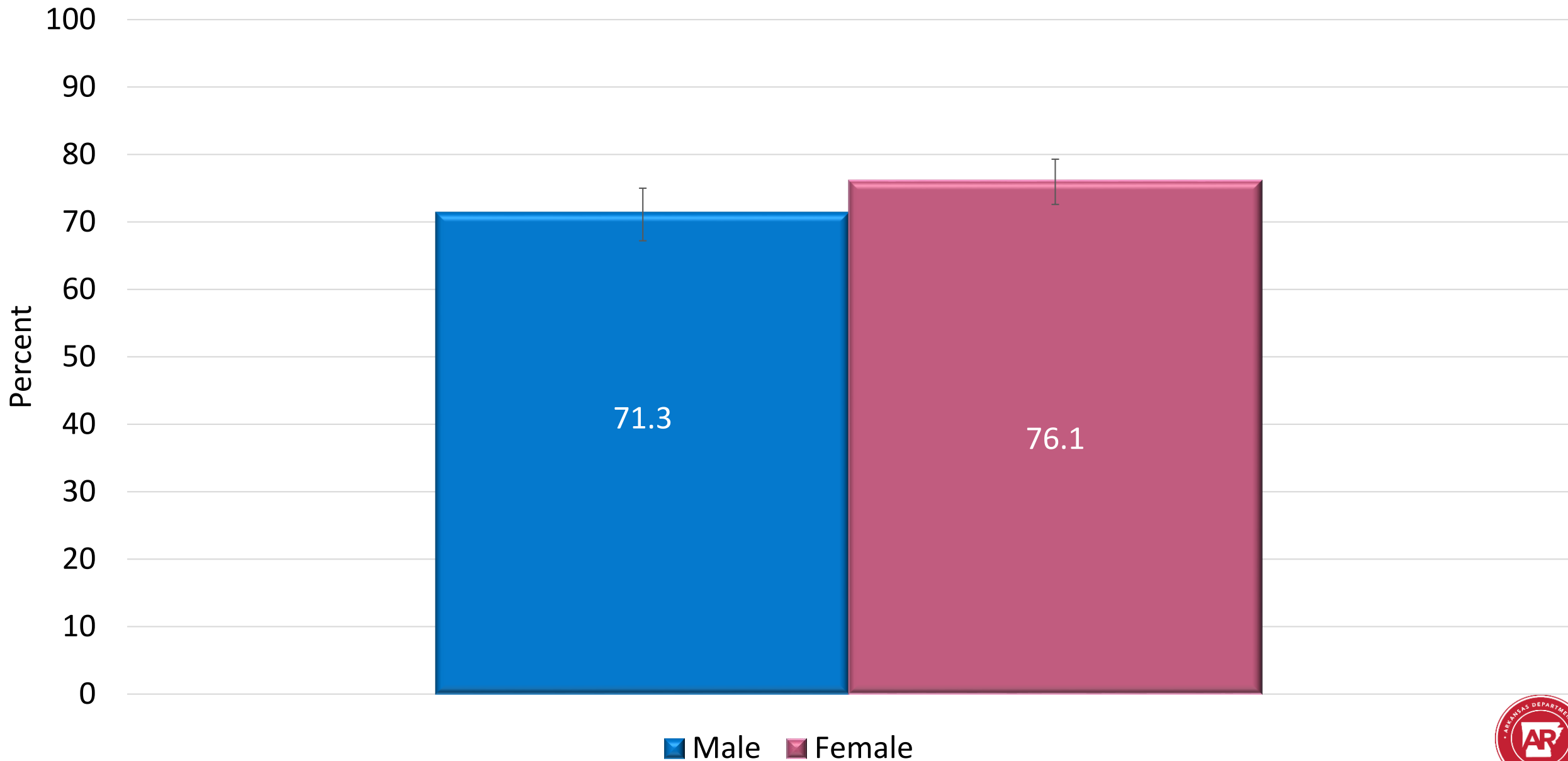
YRBSS 2015, 2017, 2019



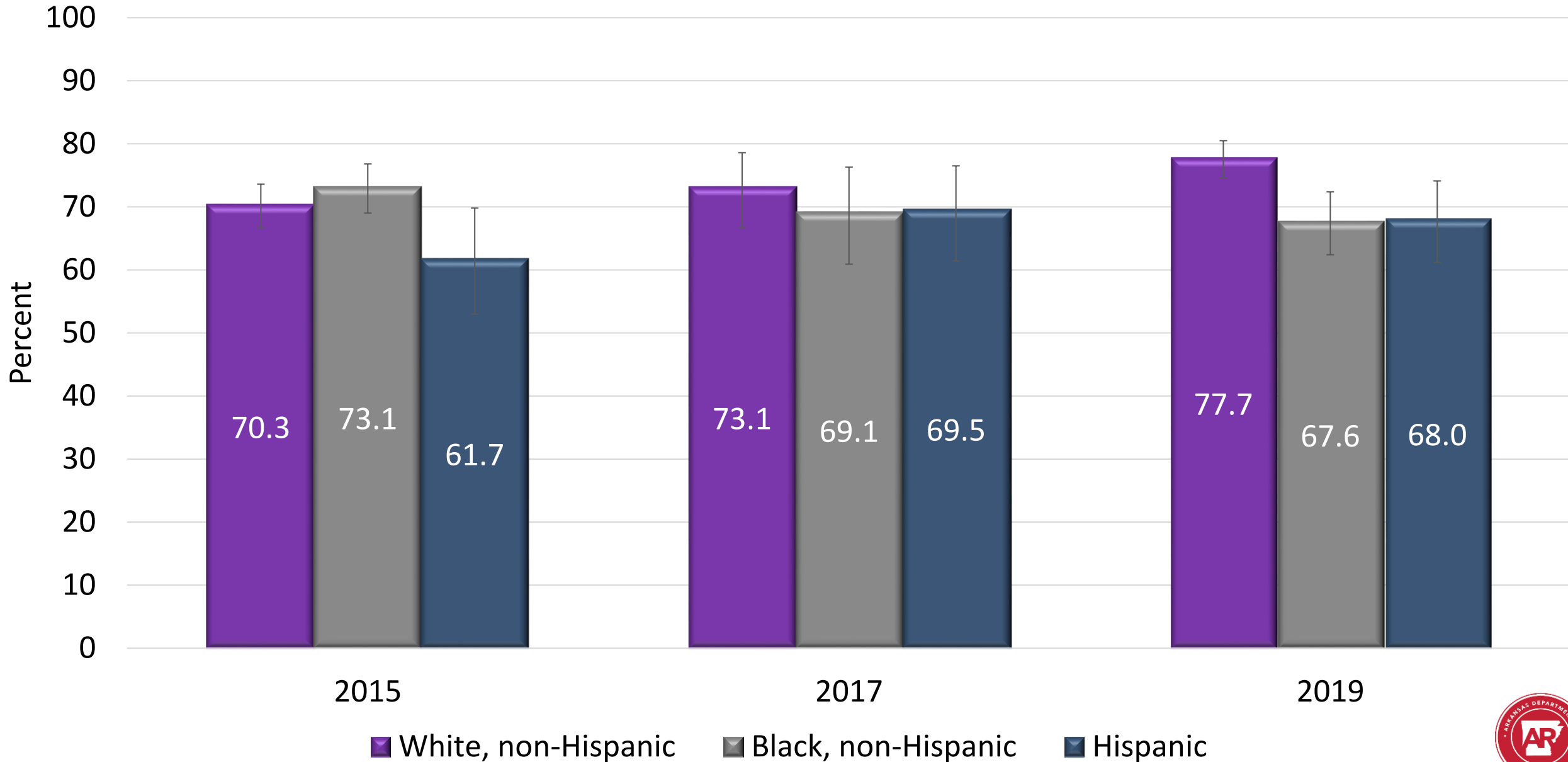
# High School Students that Visited a Dentist within the Past Year United States and Arkansas, 2015 – 2019



# High School Students that Visited a Dentist within the Past Year by Gender, Arkansas, 2019



# High School Students that Visited a Dentist within the Past Year by Race/Ethnicity, Arkansas, 2015 – 2019



# National Survey for Children's Health

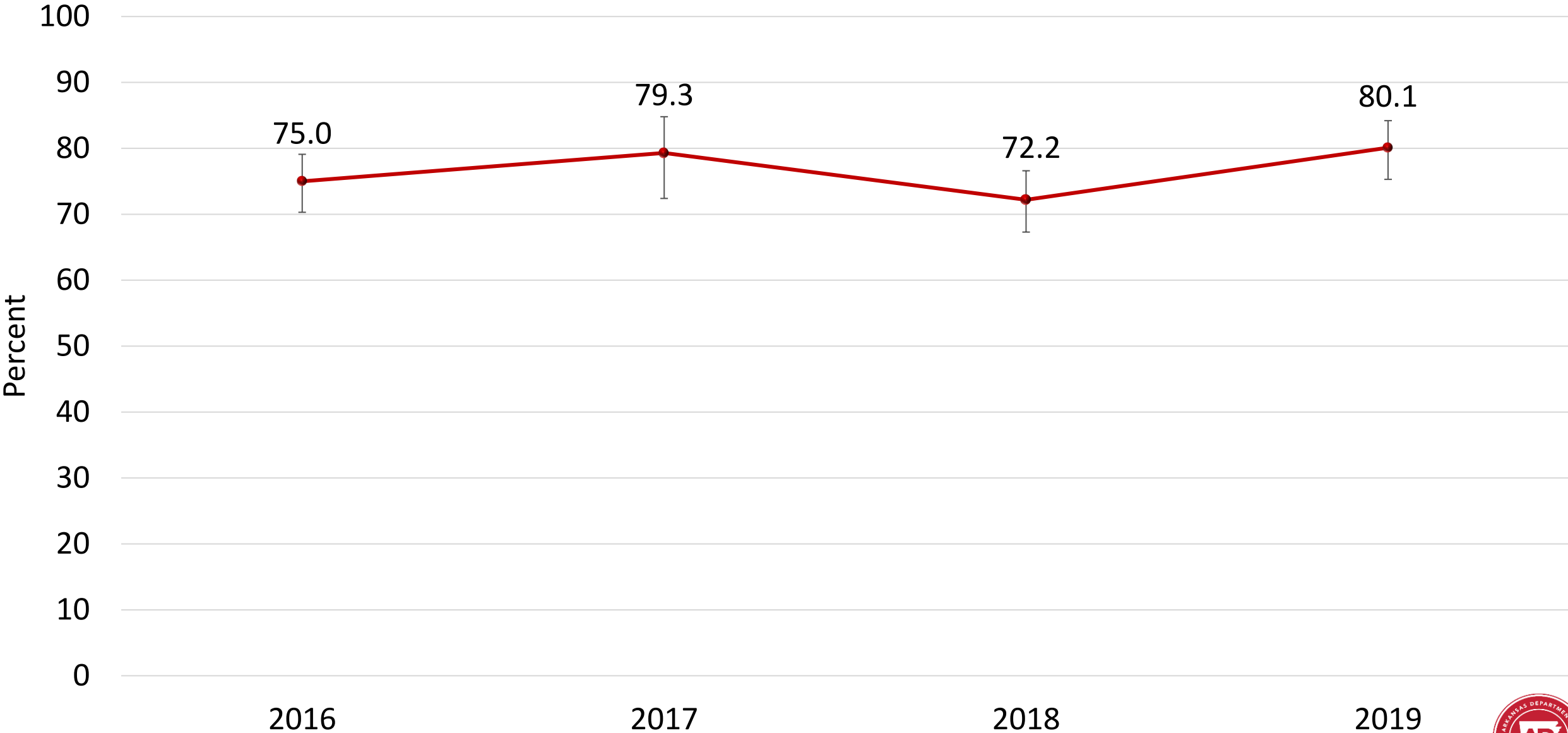
Section III

NSCH 2016, 2017, 2018, 2019



# Children (Age 1-17) that had One or More Preventive Dental Care Visits\*

## Arkansas, 2016 – 2019

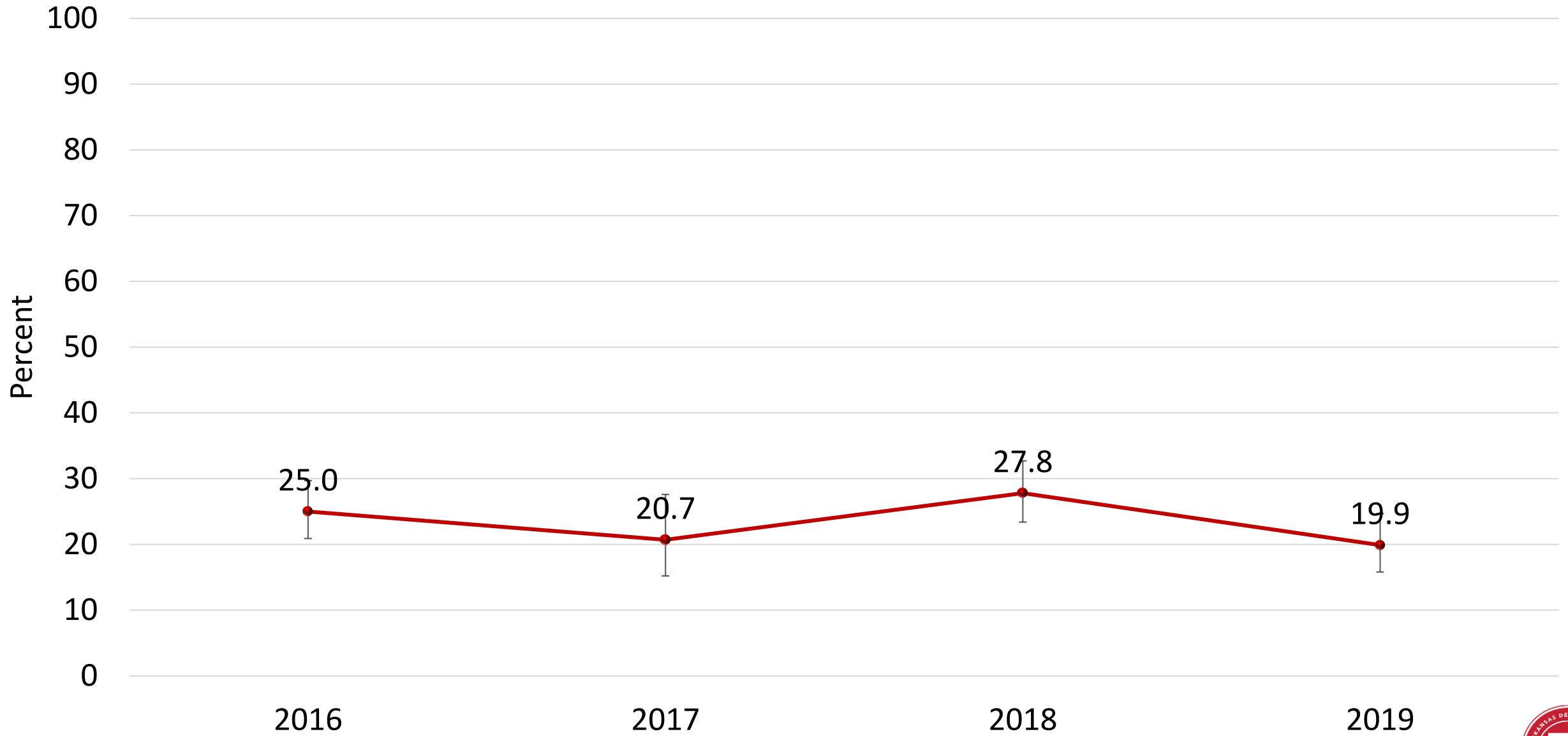


\*Preventive dental care visits include check-ups, dental cleanings, dental sealants, and fluoride treatment

Source: NSCH



# Children (Age 1-17) that had No Preventive Dental Care Visits\* Arkansas, 2016 – 2019



\*Preventive dental care visits include check-ups, dental cleanings, dental sealants, and fluoride treatment.

Source: NSCH





# State Level Oral Health Data

# Pregnancy Risk Assessment Monitoring System

Section IV

PRAMS 2016, 2017, 2018, 2019



# Why is Oral Health Care Important for Pregnant Females?



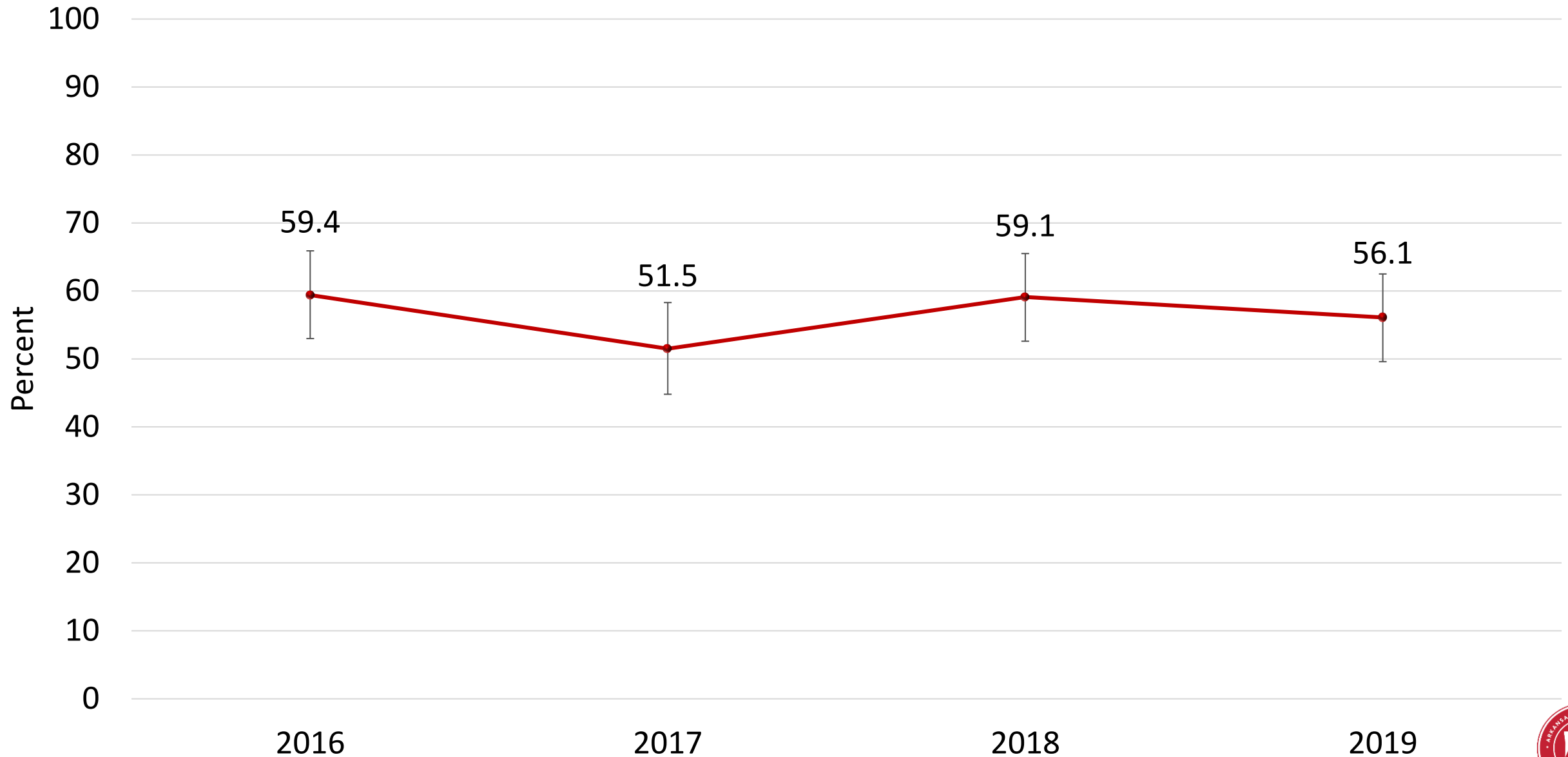
Dental care during pregnancy is **safe and recommended**.

All women should be encouraged to continue their regular dental visits or to see a dentist during any trimester of their pregnancy.

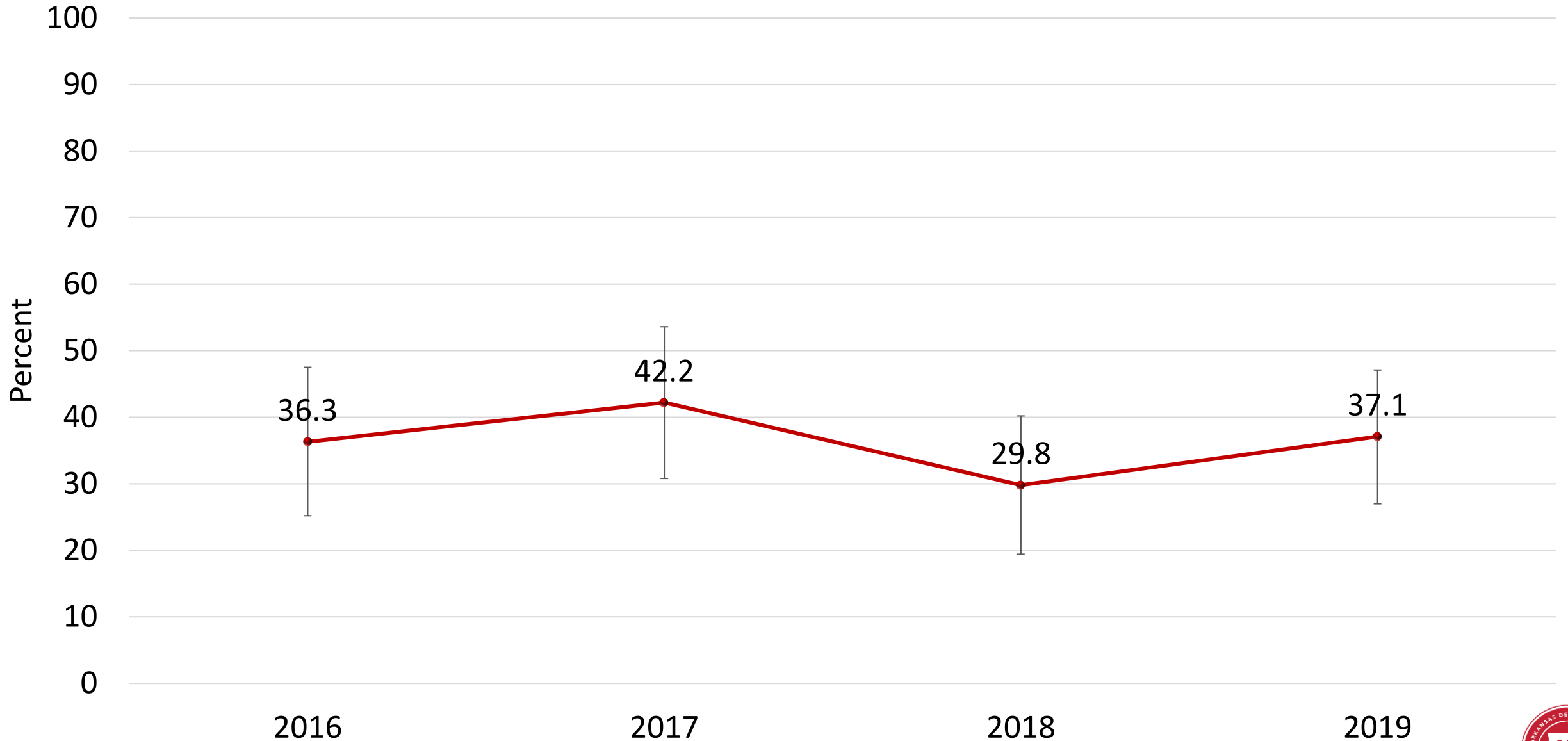
Physical changes during pregnancy increase the mother's risk for oral problems such as gingivitis, tooth mobility, tooth erosion, tooth decay, and gum disease.

Additionally, the bacteria responsible for dental cavities can easily be transmitted from the mother to the infant or toddler.

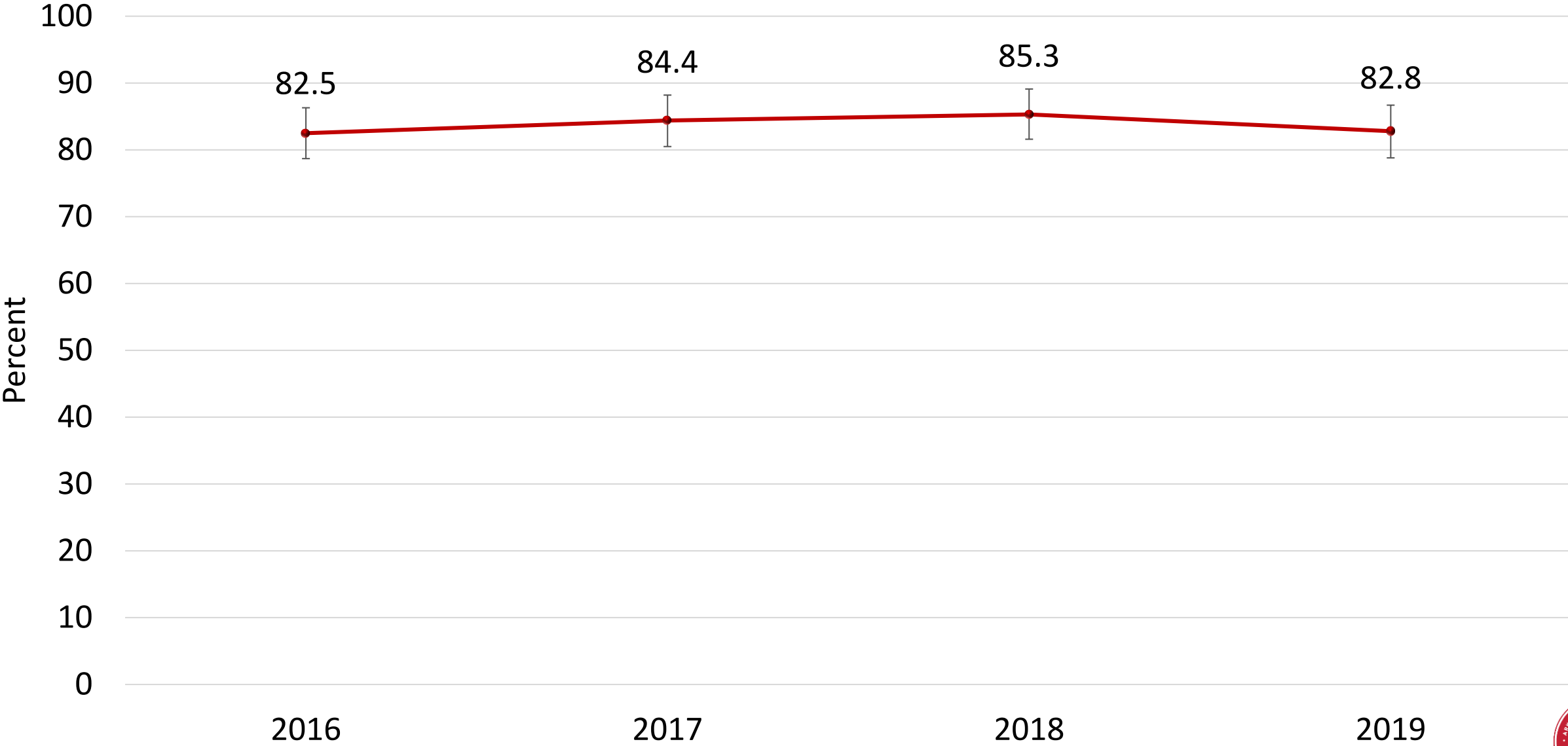
# Females who had a Dental Cleaning/Care Within the Past Year Before Their Most Recent Pregnancy, Arkansas, 2016 – 2019



# Females that had a Doctor, Nurse or Other Health Care Worker Talk to Them About Dental Care Before Pregnancy, Arkansas, 2016 – 2019



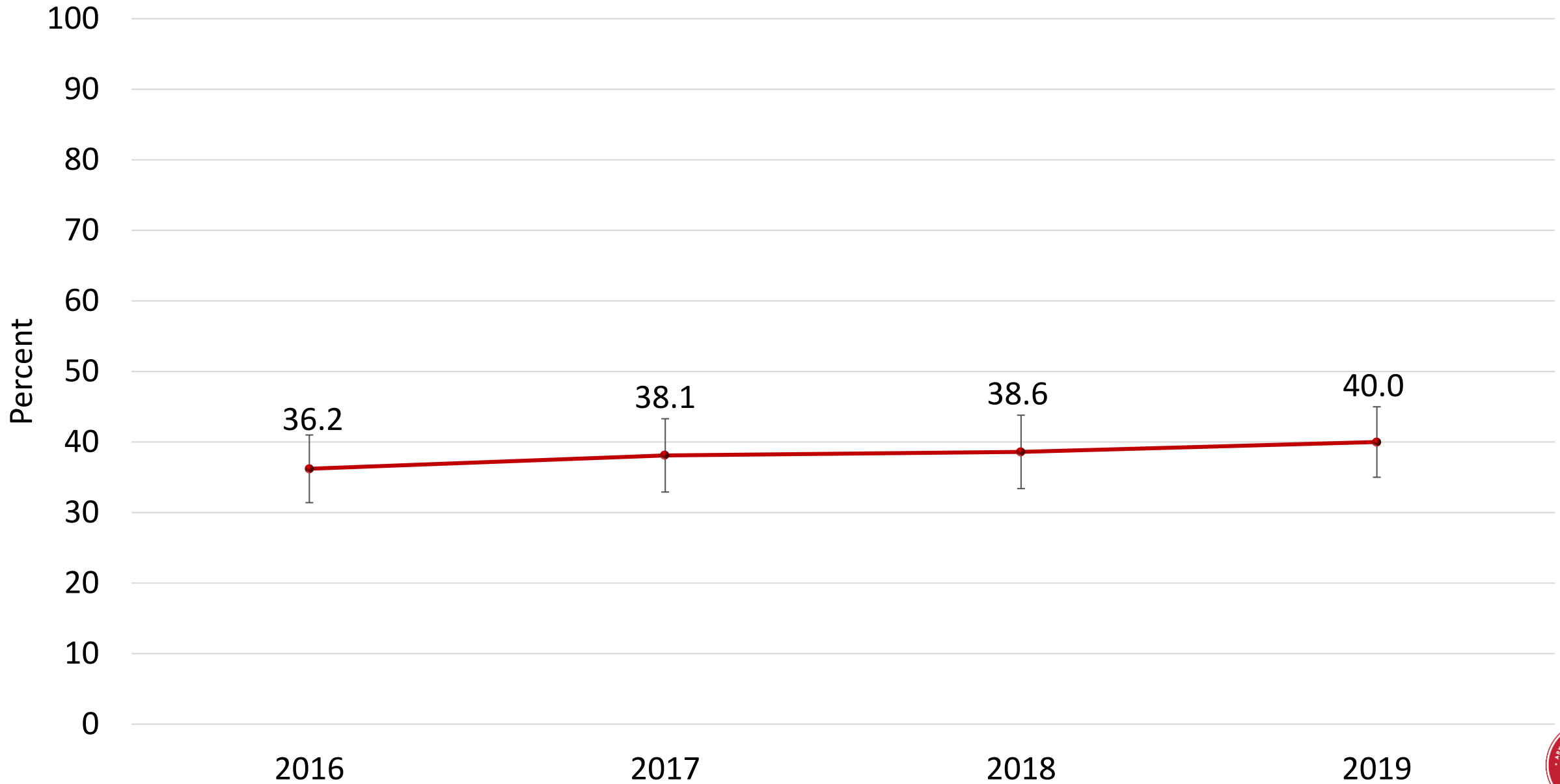
# Females who Knew it was Important to Take Care of Their Teeth and Gums During Their Most Recent Pregnancy, Arkansas, 2016 – 2019



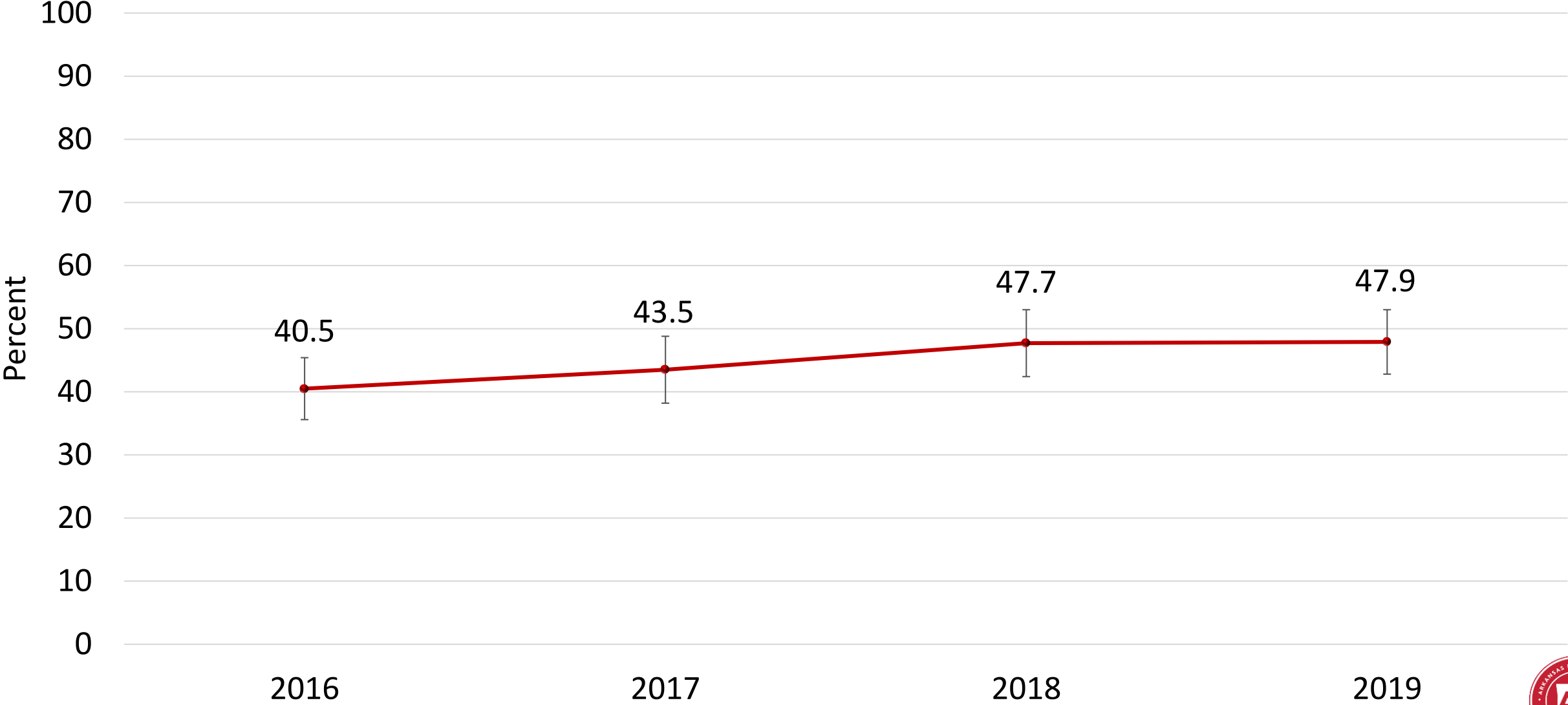
Source: ADH PRAMS



# Females who had Teeth Cleaned by a Dentist or Dental Hygienist during Their Most Recent Pregnancy, Arkansas, 2016 – 2019



# Females who had a Dental Care or Other Health Care Worker Talk to Them About How to Care for Their Teeth and Gums during Their Most Recent Pregnancy, Arkansas, 2016 – 2019

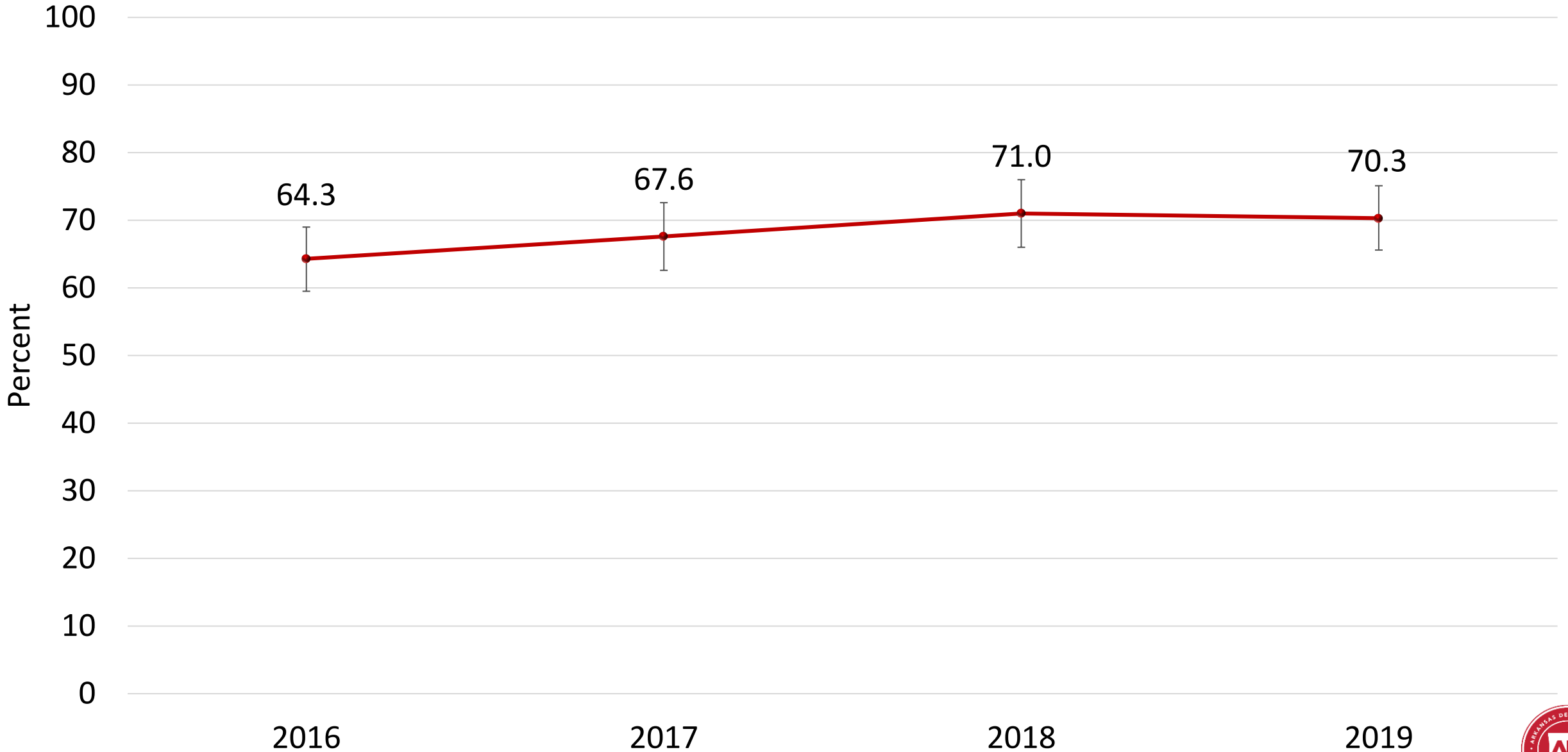


Source: ADH PRAMS

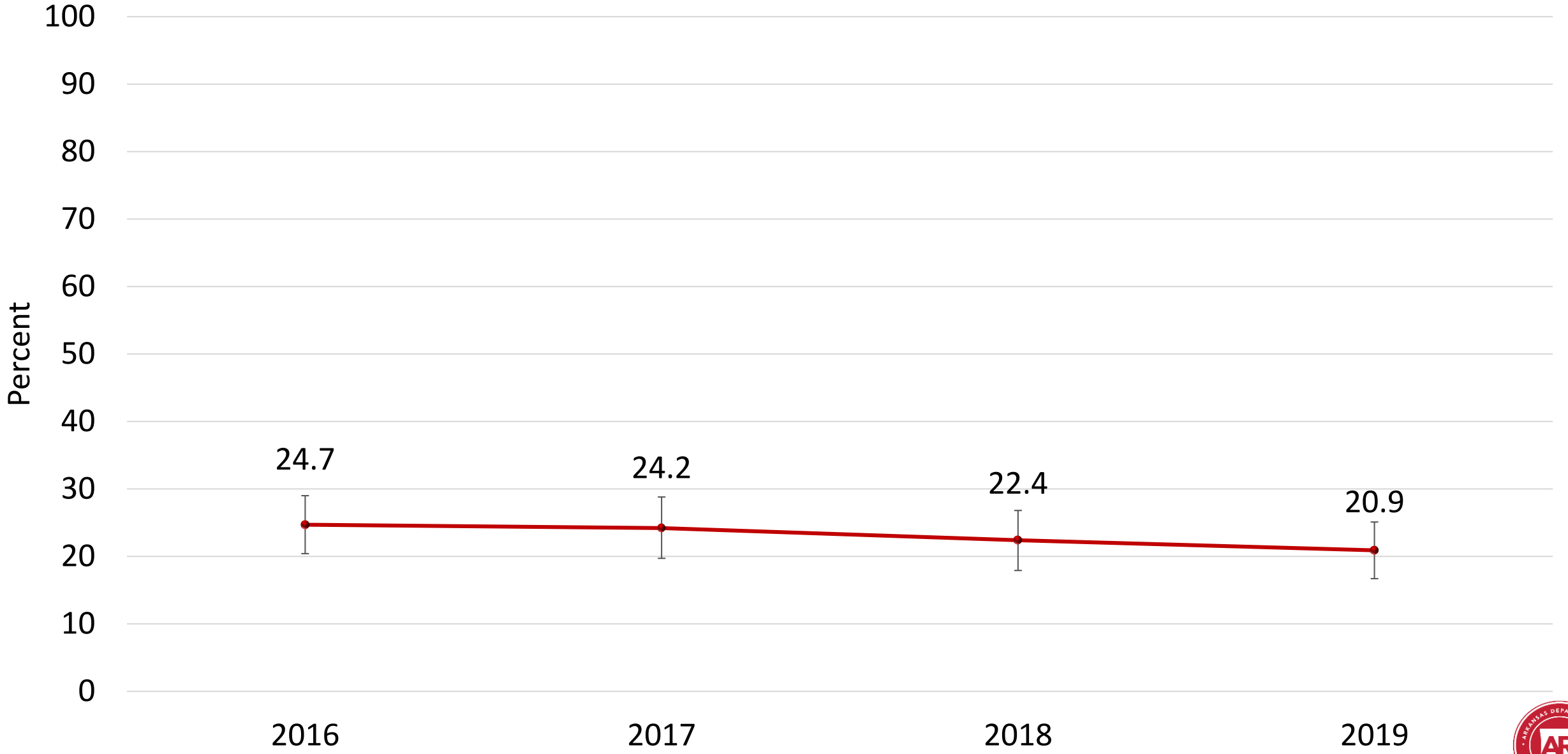




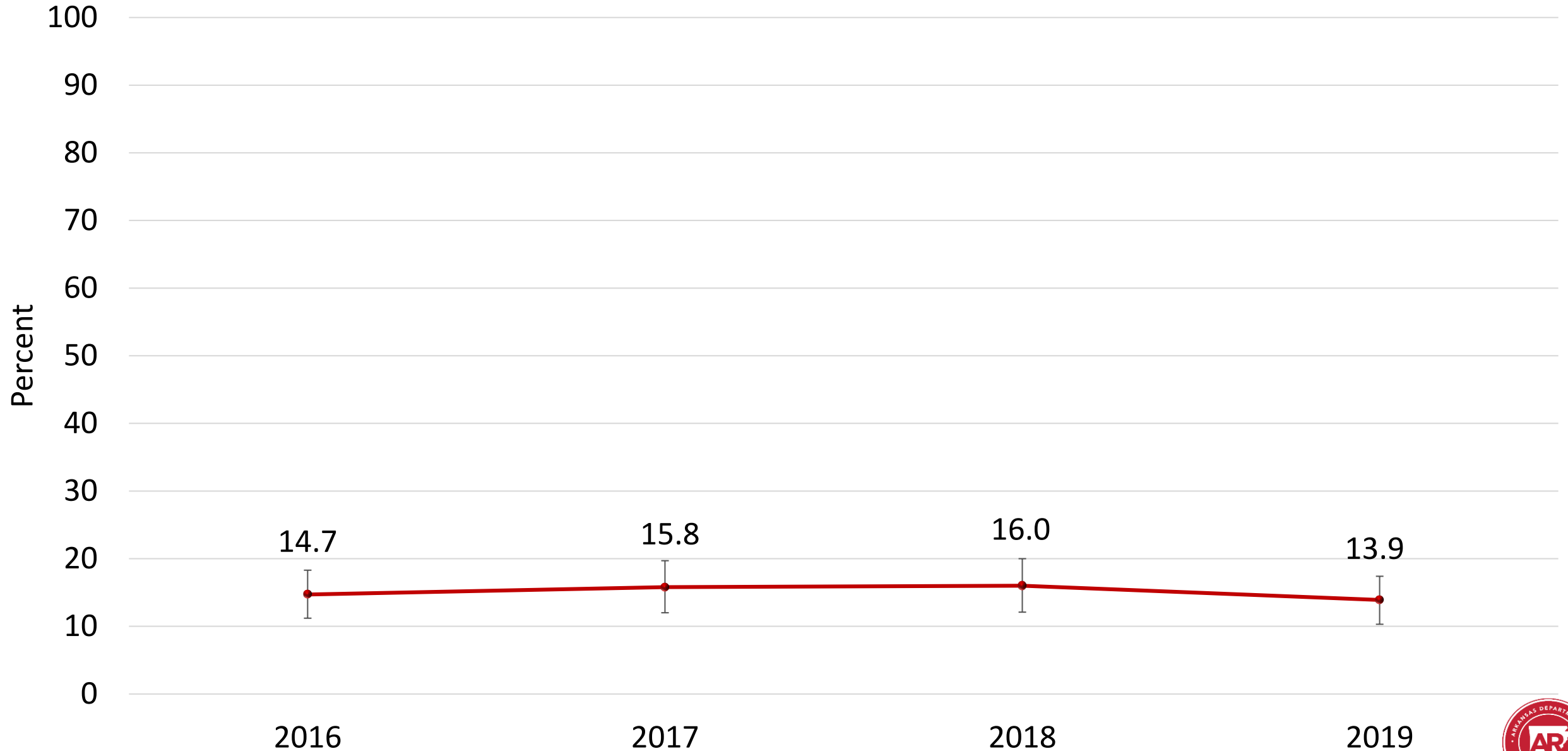
# Females who had Insurance to Cover Dental Care during Their Most Recent Pregnancy, Arkansas, 2016 – 2019



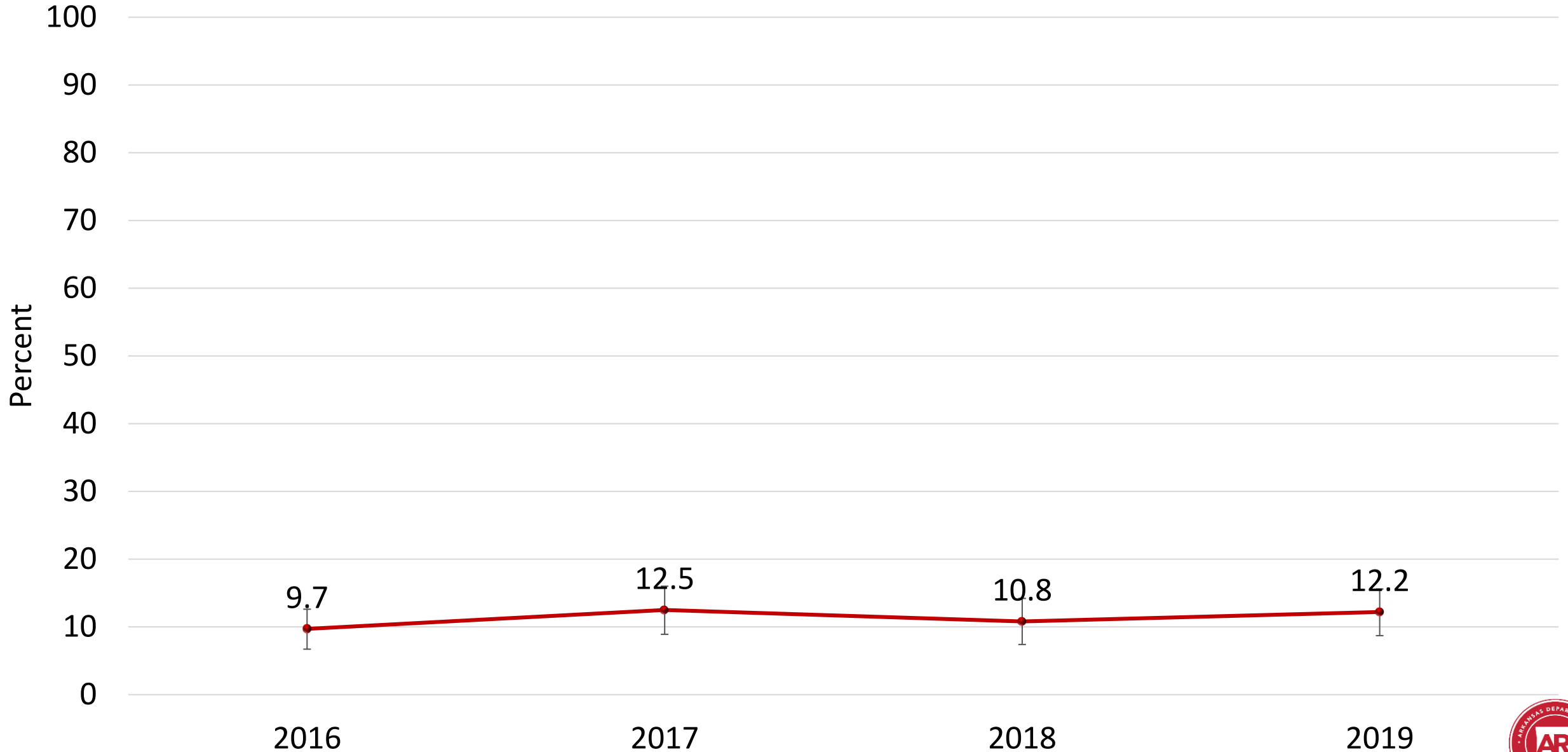
# Females who Needed to See a Dentist for a Problem during Their Most Recent Pregnancy, Arkansas 2016 – 2019



# Females who Went to a Dentist or Dental Clinic about a Problem during Their Most Recent Pregnancy, Arkansas, 2016 – 2019



# Females who had Gum Disease or Tooth Decay during Their Most Recent Pregnancy, Arkansas, 2016-2019



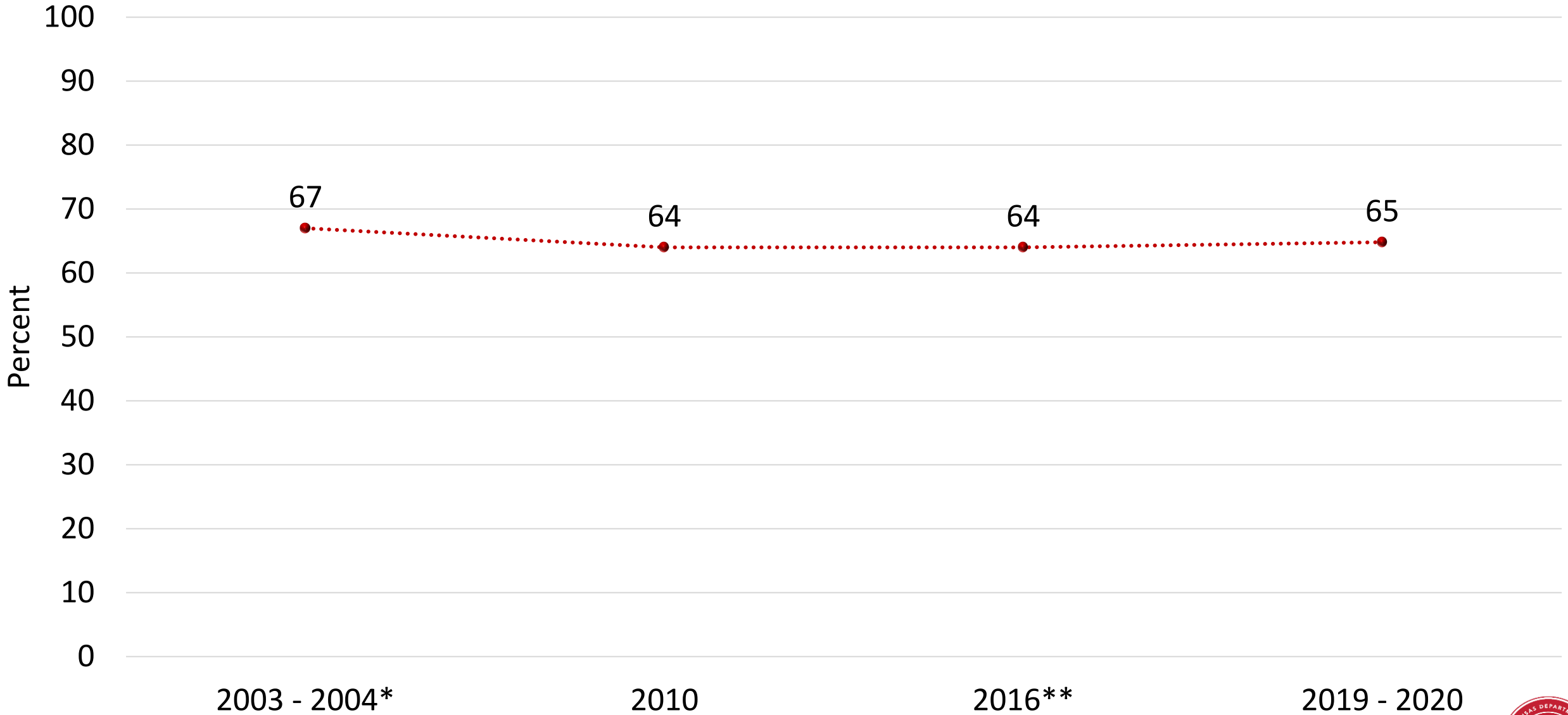
# Arkansas Basic Screening Survey

Section V

ArBSS 2003-2004, 2010, 2016, 2019-2020 Selected School Years Survey



# Decay Experience among Arkansas 3rd Graders 2003-2020 Selected Schools Years



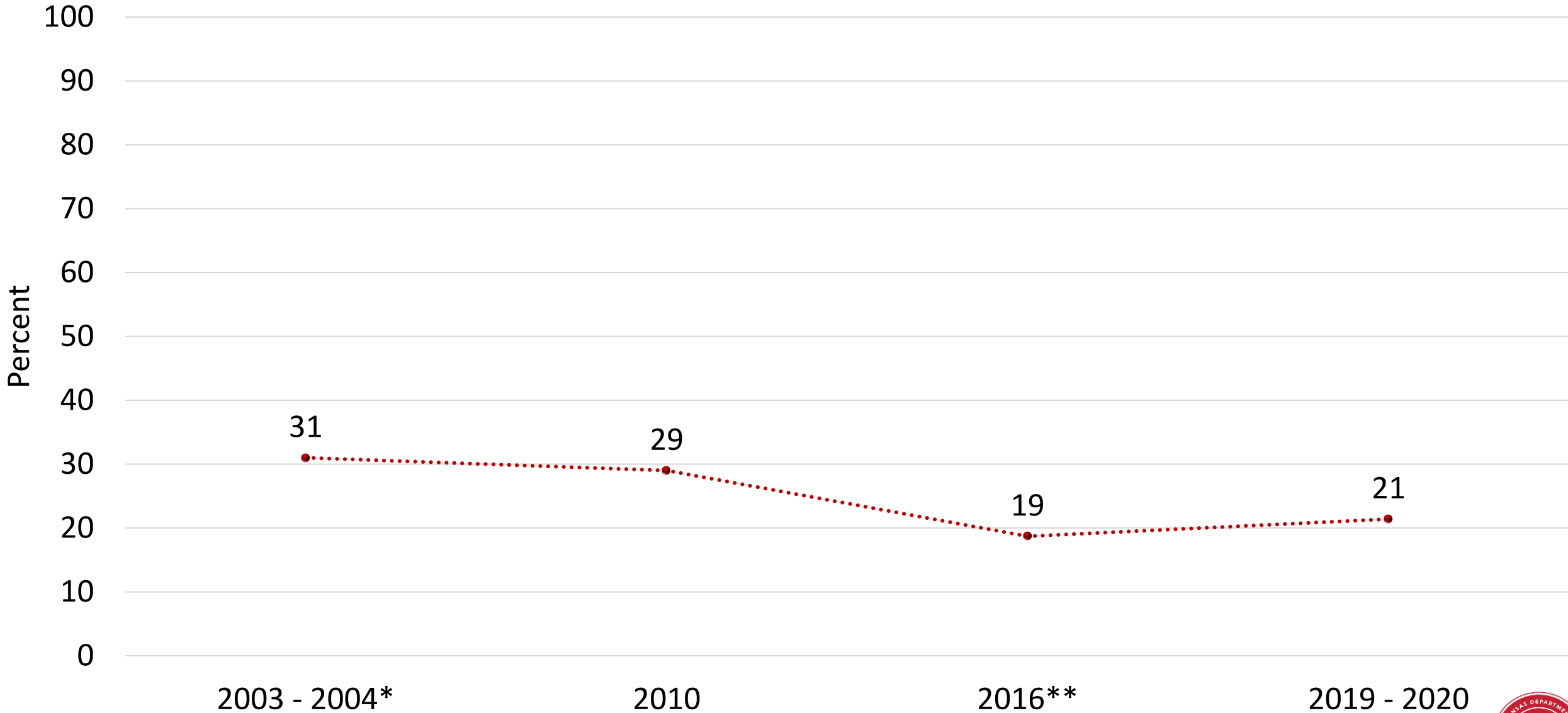
Source: Internal ArBSS reports

\*Due to unweighted percent, caution is recommended in interpretation

\*\*Methodological changes were made for 2016 sample size, caution is recommended in interpretation



# Untreated Decay among Arkansas 3rd Graders 2003-2020 Selected School Years



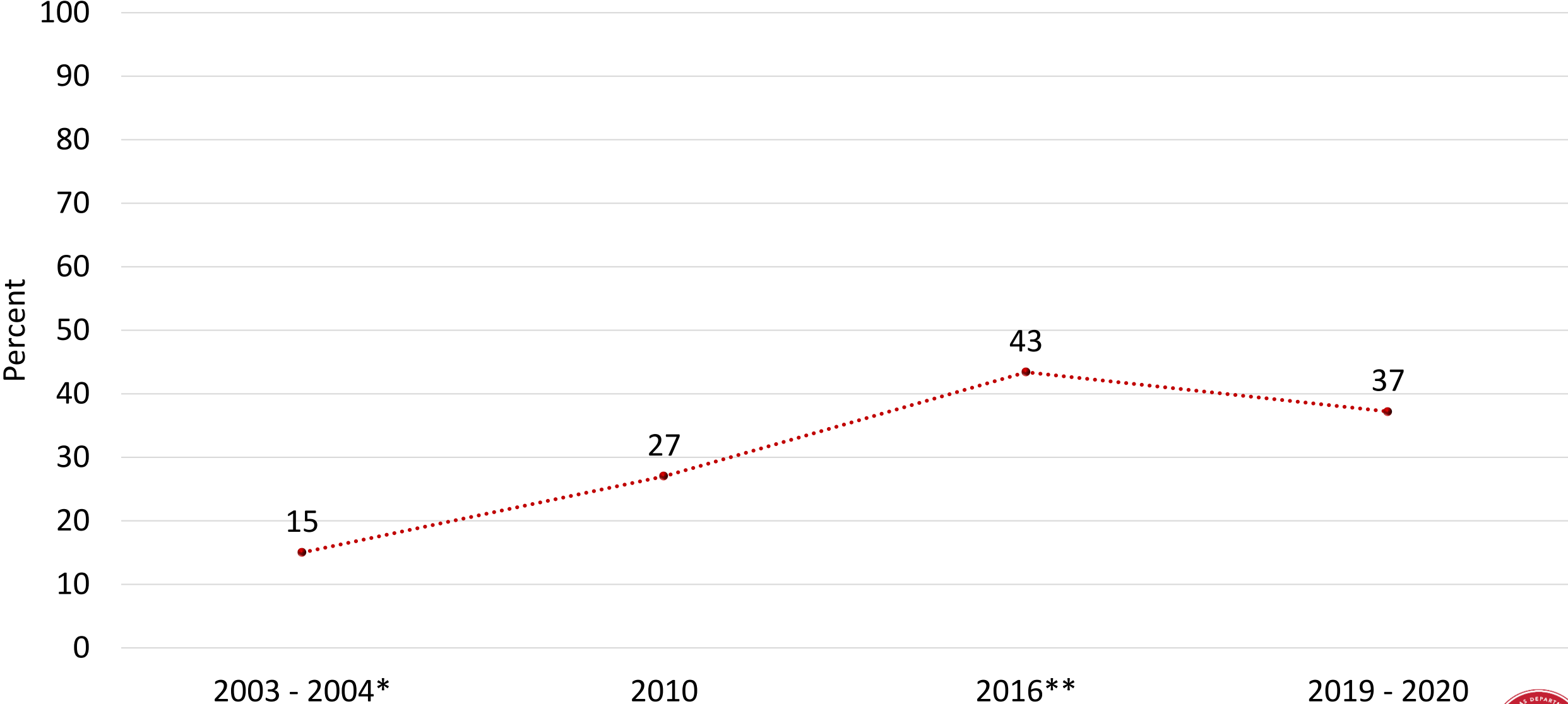
Source: Internal ArBSS reports

\*Due to unweighted percent, caution is recommended in interpretation

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# Dental Sealants on at Least 1 Permanent Molar among Arkansas 3rd Graders 2003-2020 Selected School Years



Source: Internal ArBSS reports

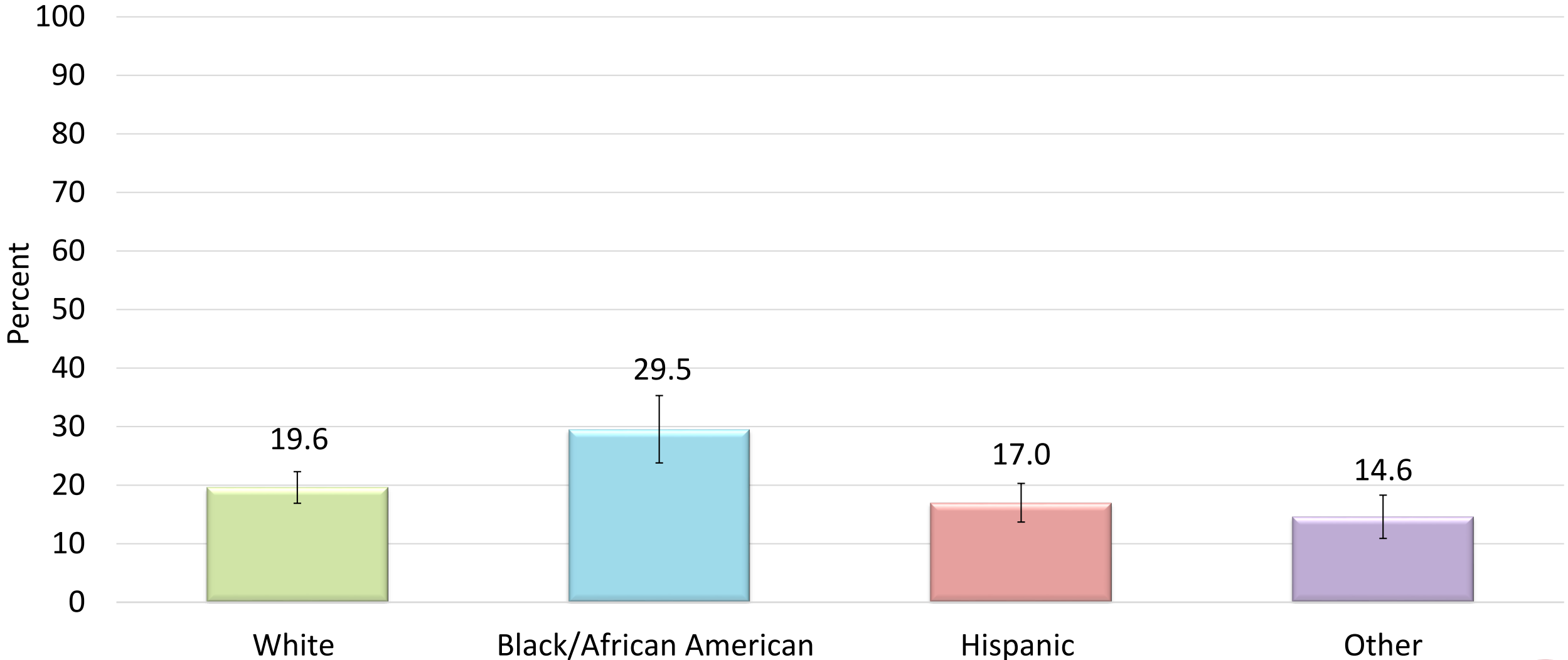
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# Students with Untreated Decay Experience by Race/Ethnicity\* Arkansas, 2019-2020 School Year



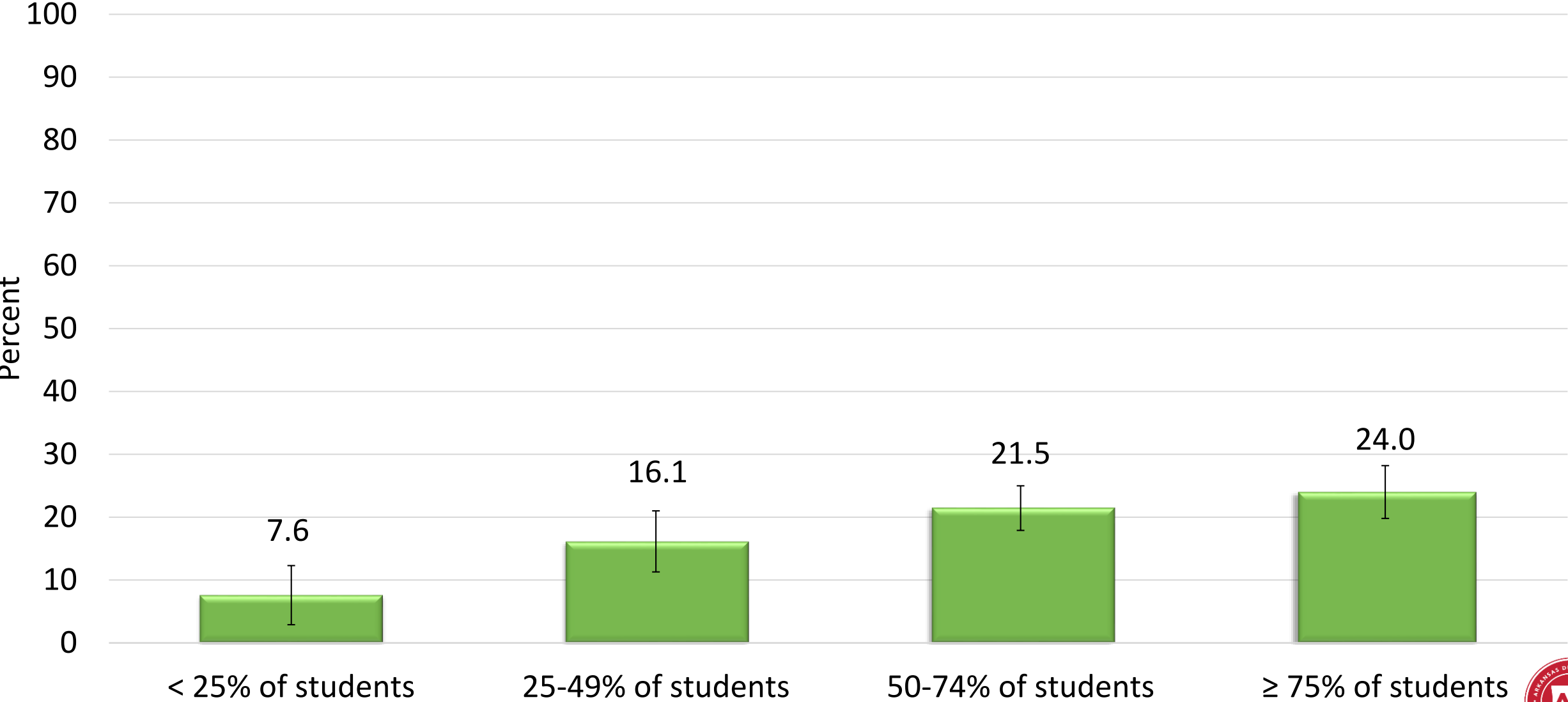
Source: ArBSS

Other Race/Ethnicity includes Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multi-Racial

\*Missing race/ethnicity excluded from analysis (n = 580, 12.8%)



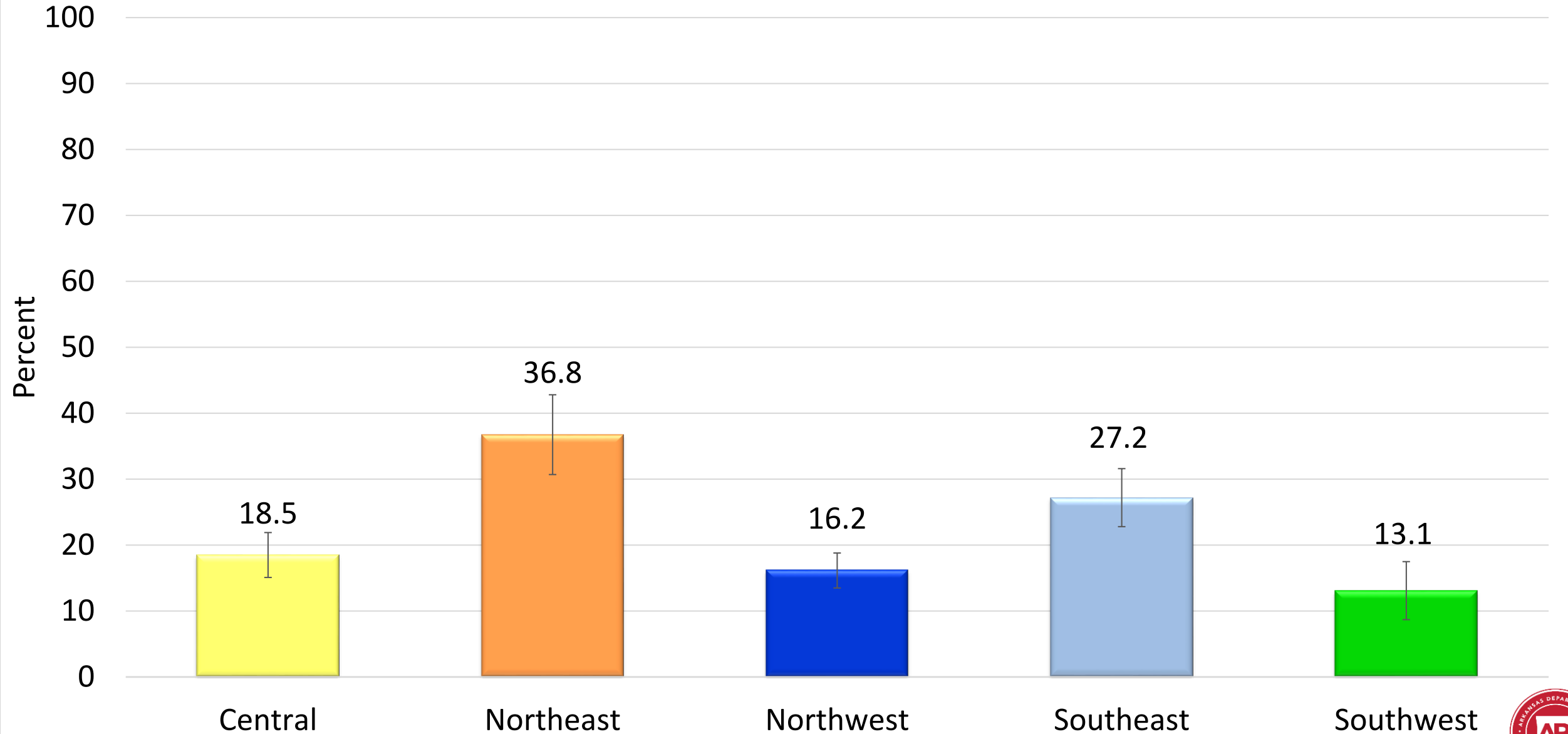
# Students with Untreated Decay Experience by Percent of Students Eligible for the National School Lunch Program, Arkansas, 2019-2020 School Year



Source: ArBSS

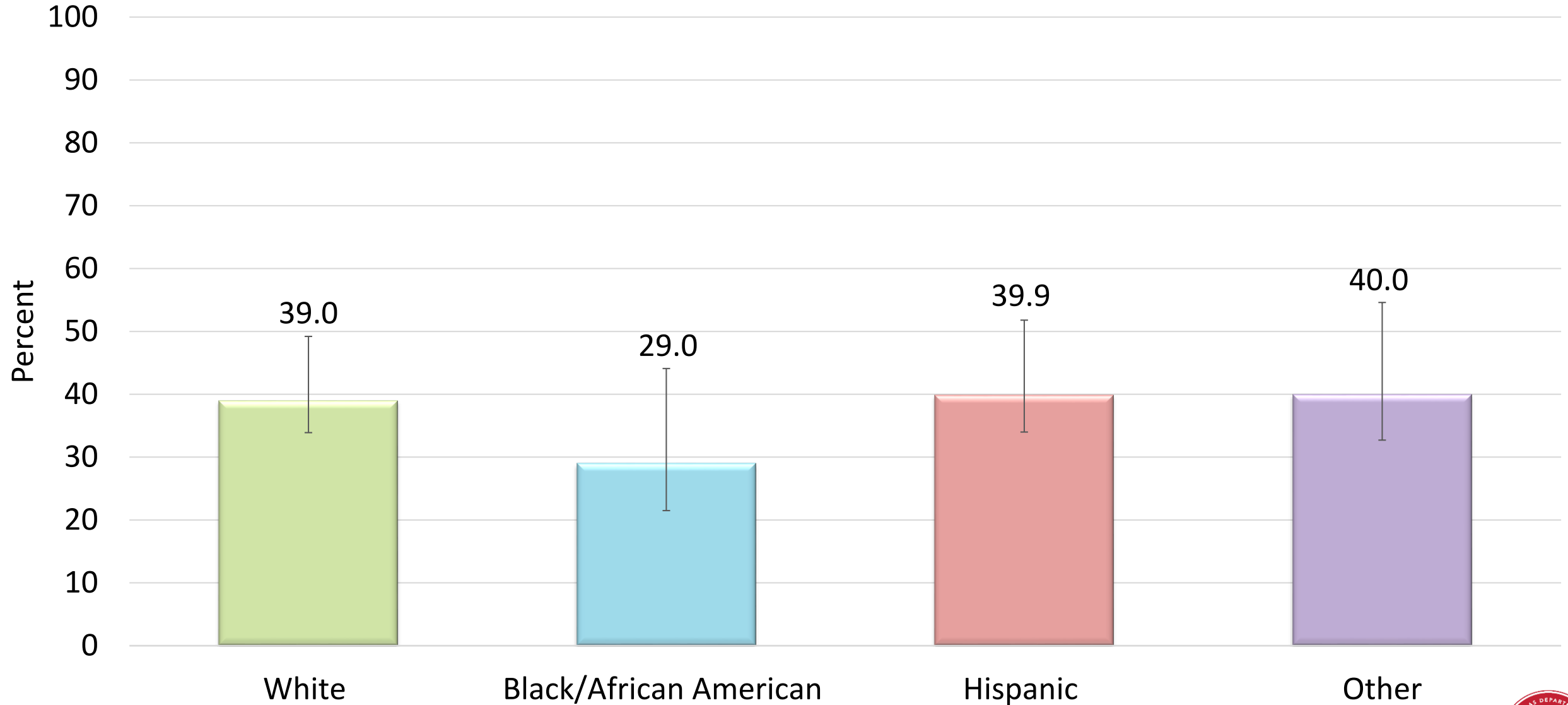


# Students with Untreated Decay Experience by Public Health Region Arkansas, 2019-2020 School Year



# Percent of Students with Dental Sealants by Race/Ethnicity\*

## Arkansas, 2019-2020 School Year



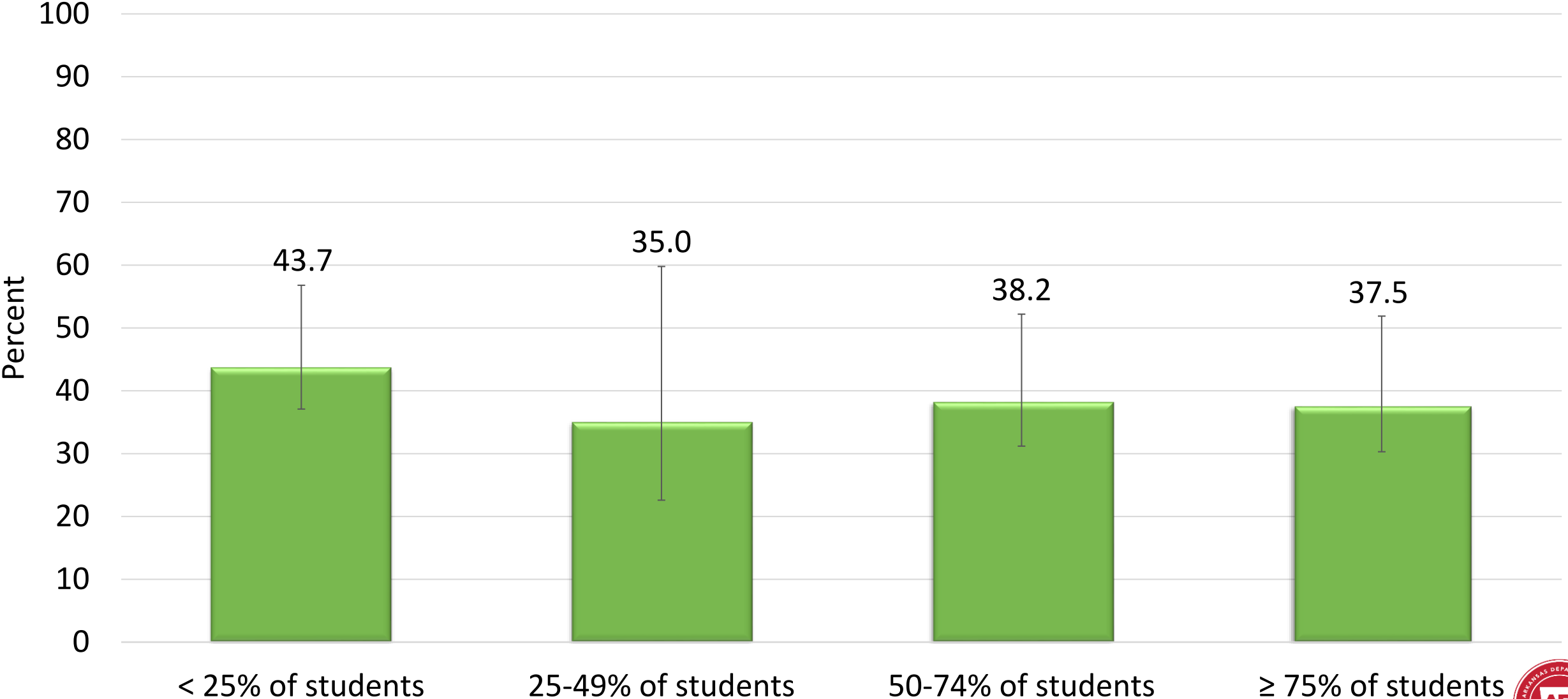
Source: ArBSS

Other Race/Ethnicity includes Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multi-Racial

\*Missing race/ethnicity excluded from analysis (n = 580, 12.8%)



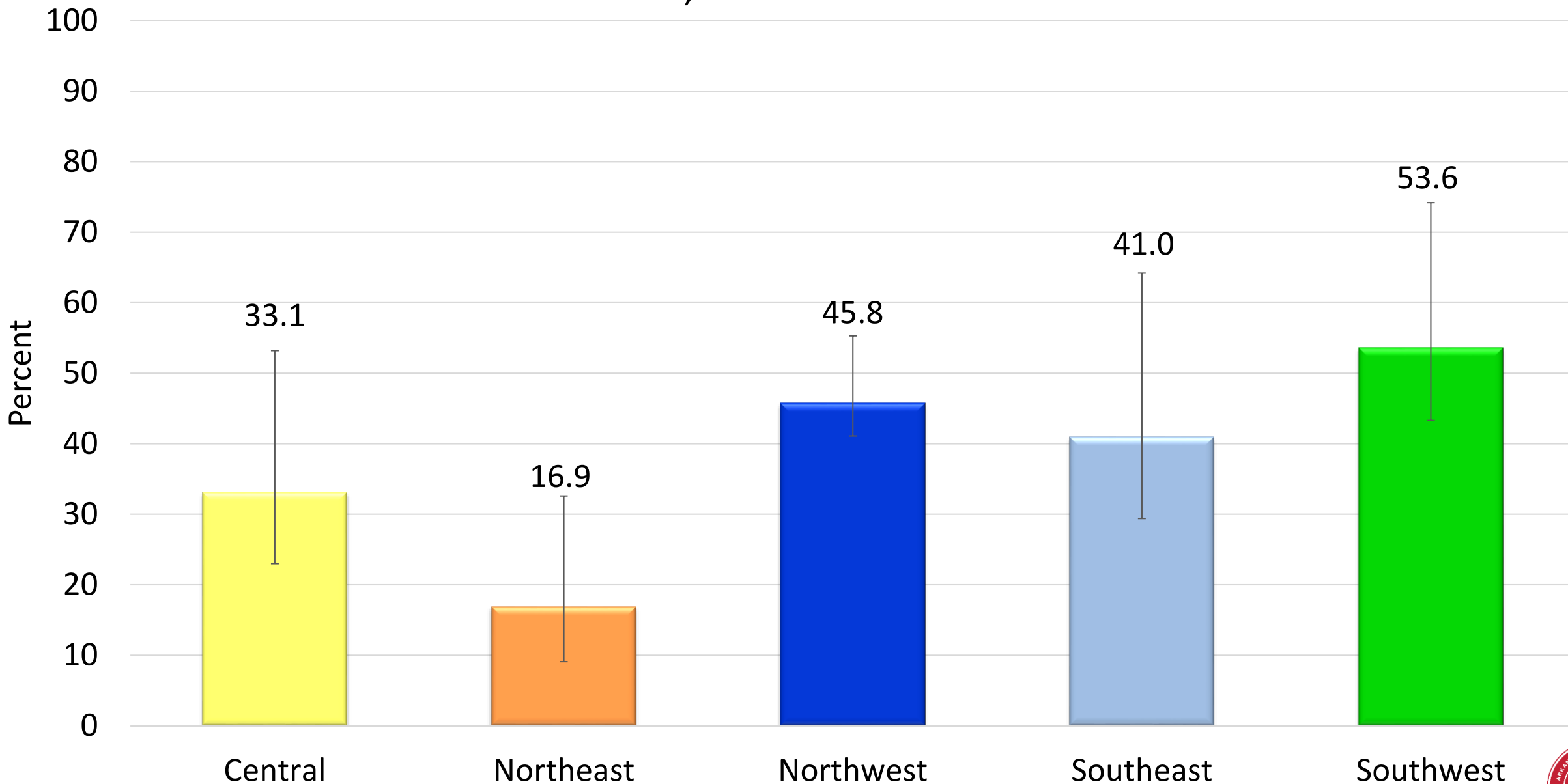
# Students with Untreated Decay Experience by Percent of Students Eligible for the National School Lunch Program, Arkansas, 2019-2020 School Year



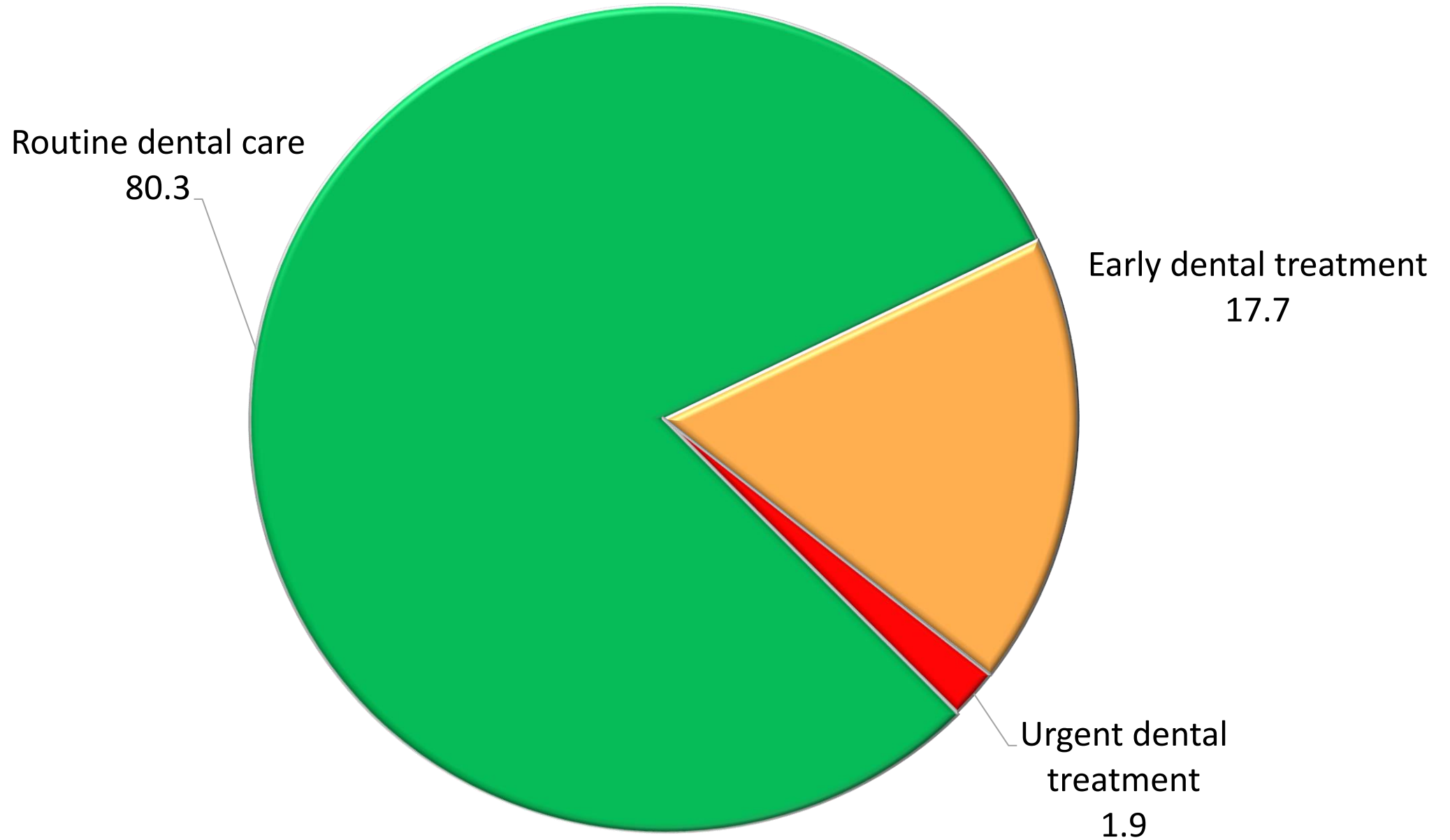
Source: ArBSS



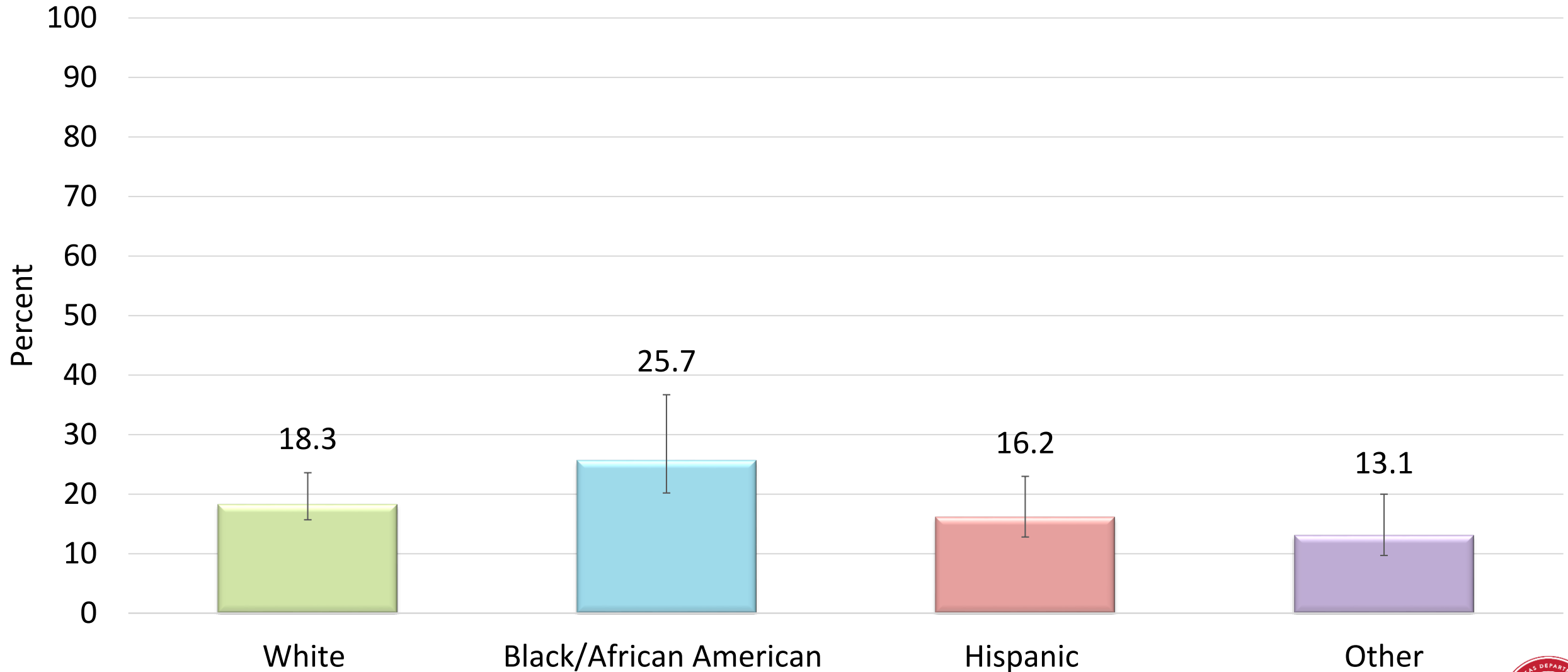
# Percent of Students with Dental Sealants by Public Health Region Arkansas, 2019-2020 School Year



# Percent of Students in Need of Dental Treatment Arkansas, 2019-2020 School Year



# Percent of Students Needing Early to Urgent Dental Treatment by Race/Ethnicity\*, Arkansas, 2019-2020 School Year



Source: ArBSS

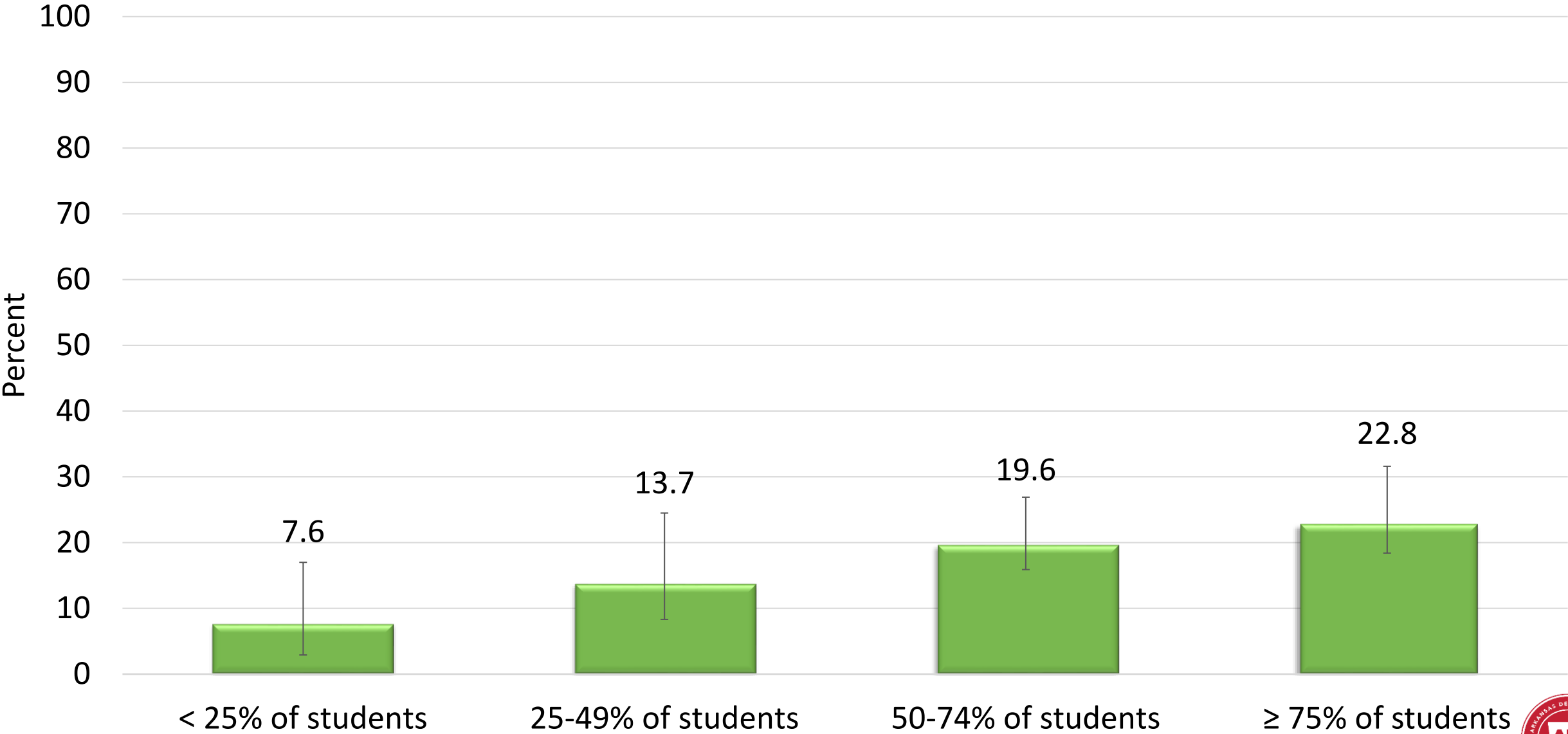
Other Race/Ethnicity includes Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Multi-Racial

\*Missing race/ethnicity excluded from analysis (n = 580, 12.8%)





# Students with Untreated Decay Experience by Percent of Students Eligible for the National School Lunch Program, Arkansas, 2019-2020 School Year



Source: ArBSS

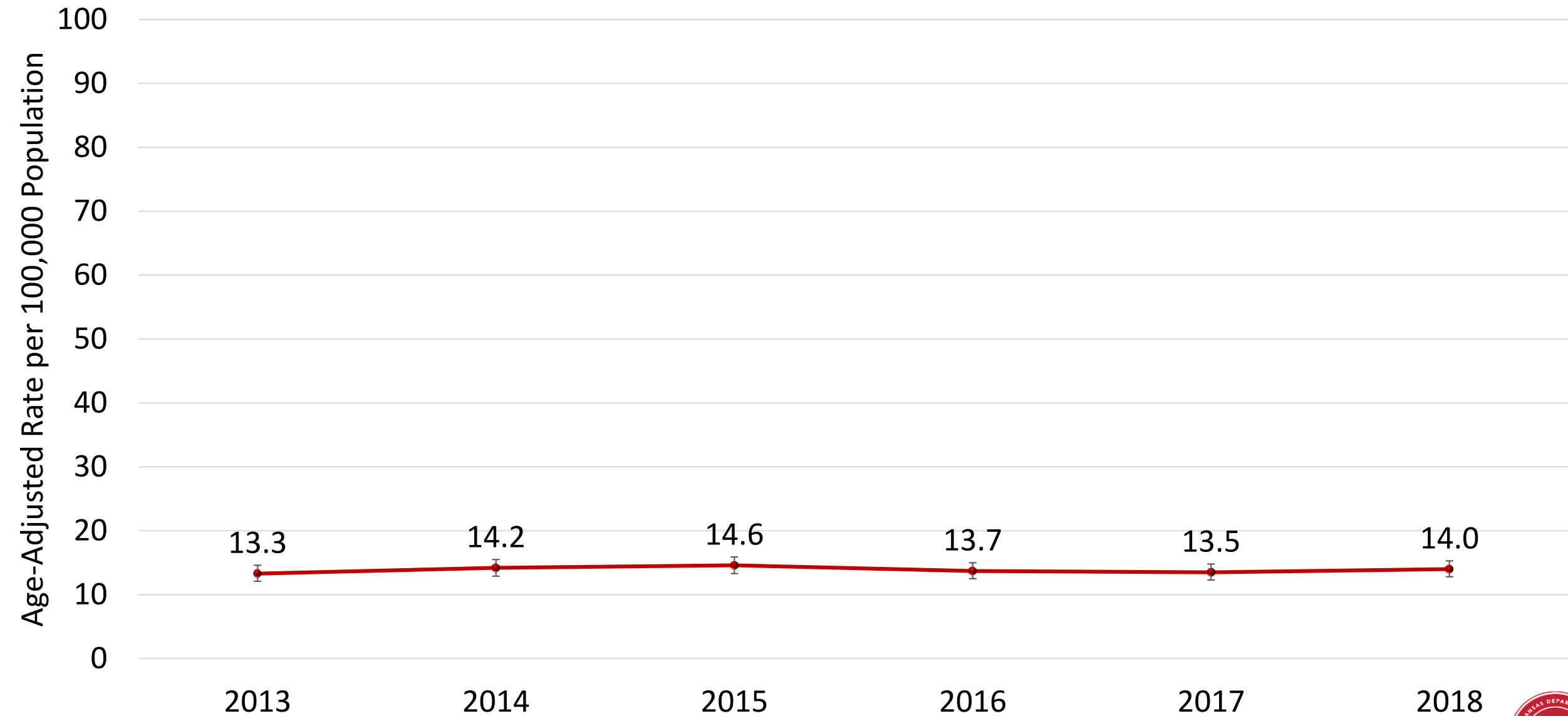
# Arkansas Cancer Registry Query System

Section VI

2013, 2014, 2015, 2016, 2017, 2018



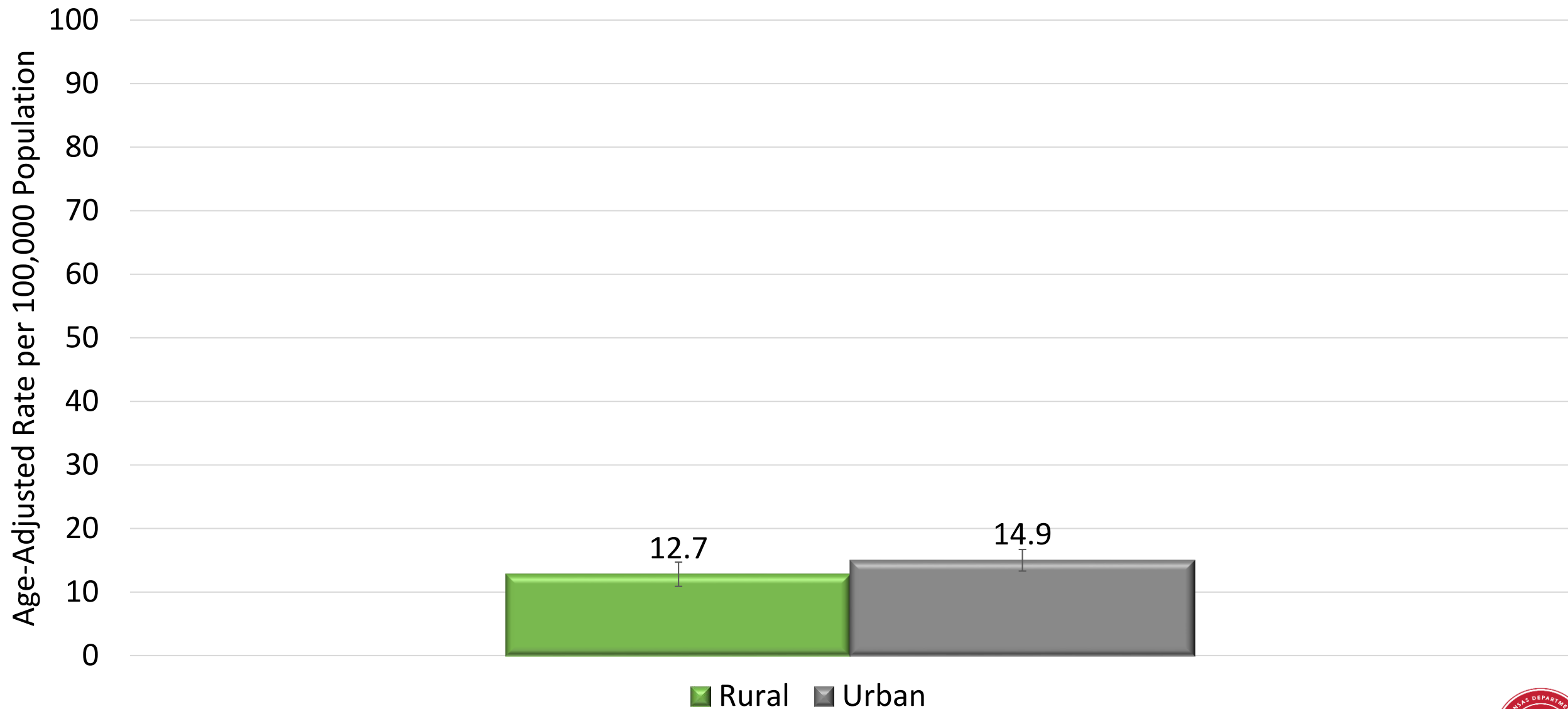
# Oral Cavity and Pharynx Cancer Incidence Age-Adjusted Rate Arkansas, 2013 – 2018



Source: Arkansas Cancer Registry Query System  
Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population.



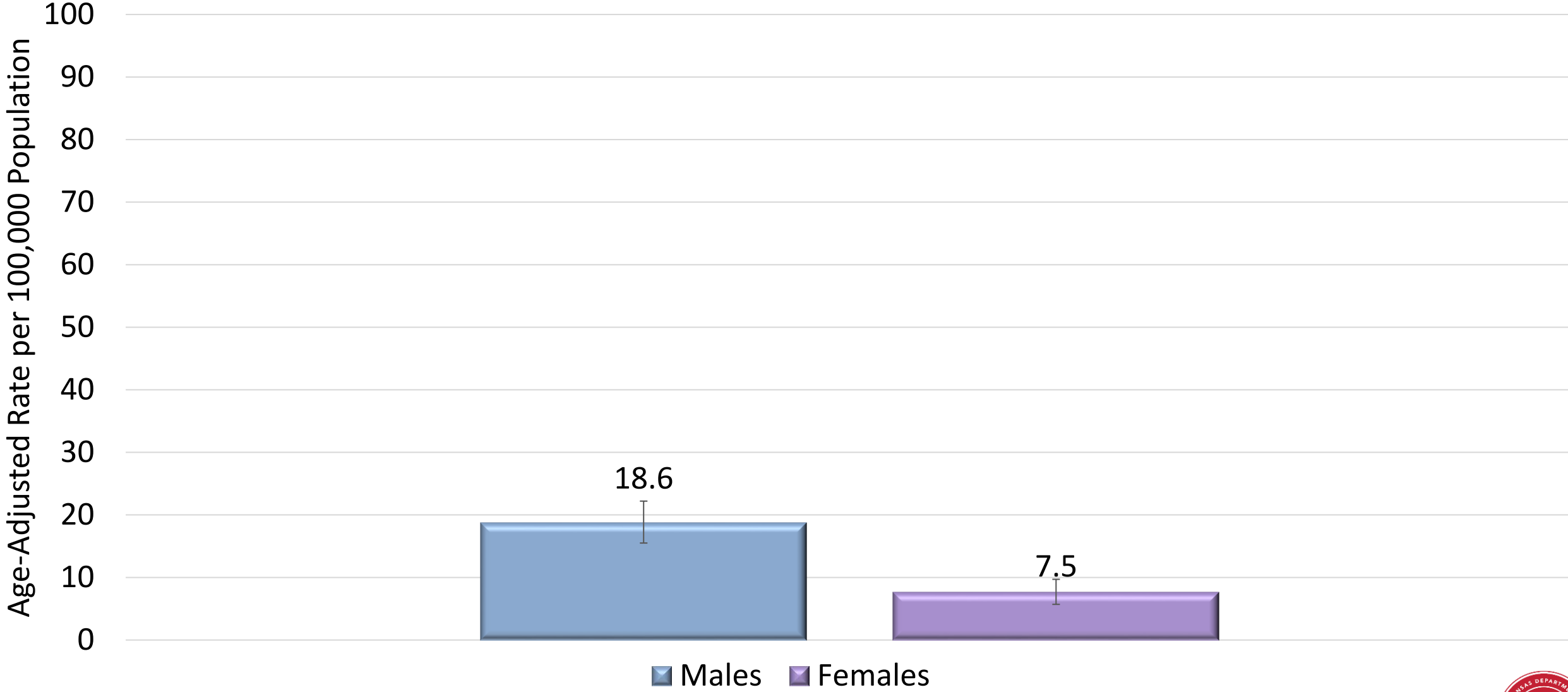
# Oral Cavity and Pharynx Cancer Incidence Age-Adjusted Rate by Geographic Region, Arkansas, 2018



Source: Arkansas Cancer Registry Query System  
Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population.



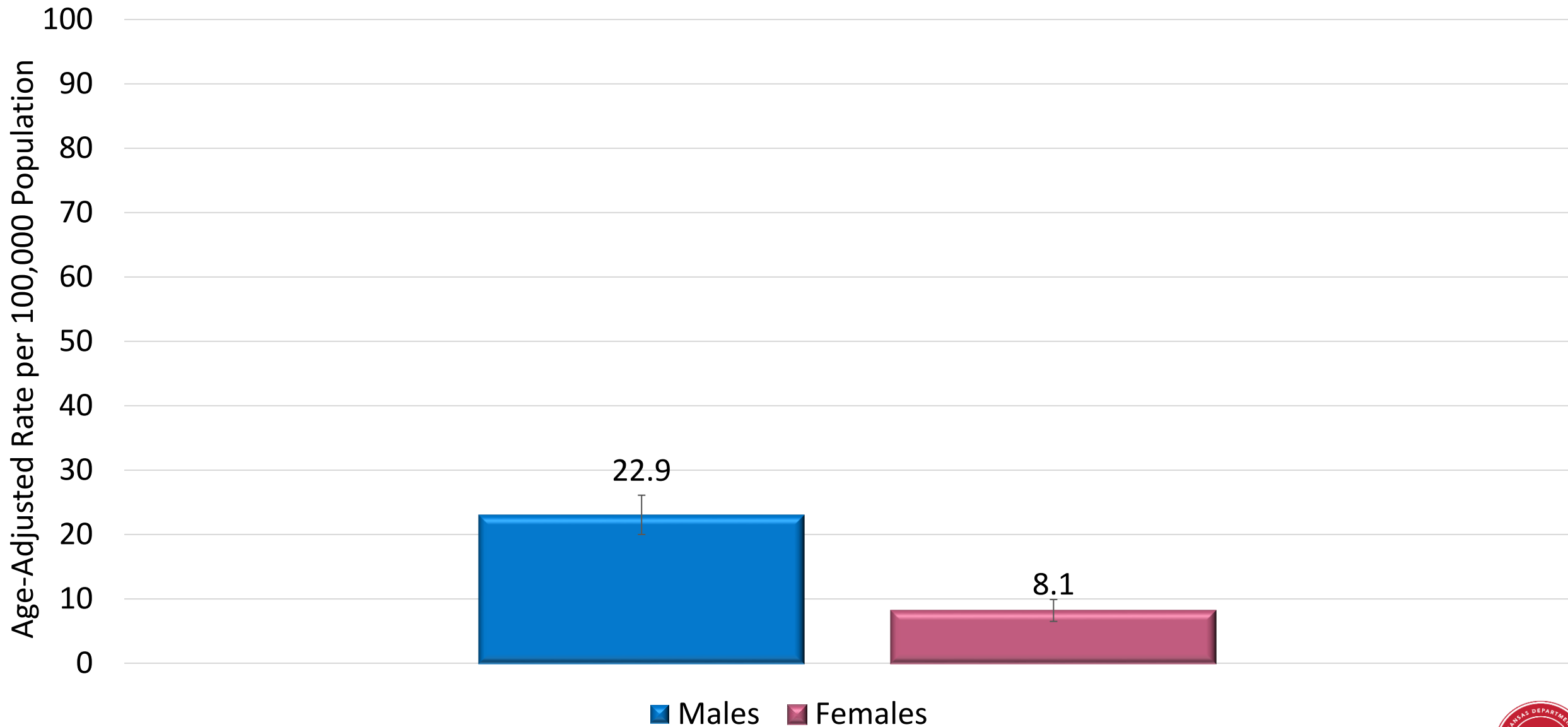
# Oral Cavity and Pharynx Cancer Incidence Age-Adjusted Rate among Rural Areas by Gender, Arkansas, 2018



Source: Arkansas Cancer Registry Query System  
Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population.



# Oral Cavity and Pharynx Cancer Incidence Age-Adjusted Rate among **Urban** Areas by Gender, Arkansas, 2018



Source: Arkansas Cancer Registry Query System  
Rates are age-adjusted to the 2000 U.S. Standard Population. All rates are per 100,000 population.



# Dental Health Professionals in Arkansas

Section VII

2016, 2017, 2018, 2019, 2020, 2021

As reported through the Arkansas State Board of Dental Examiners (ASBDE)



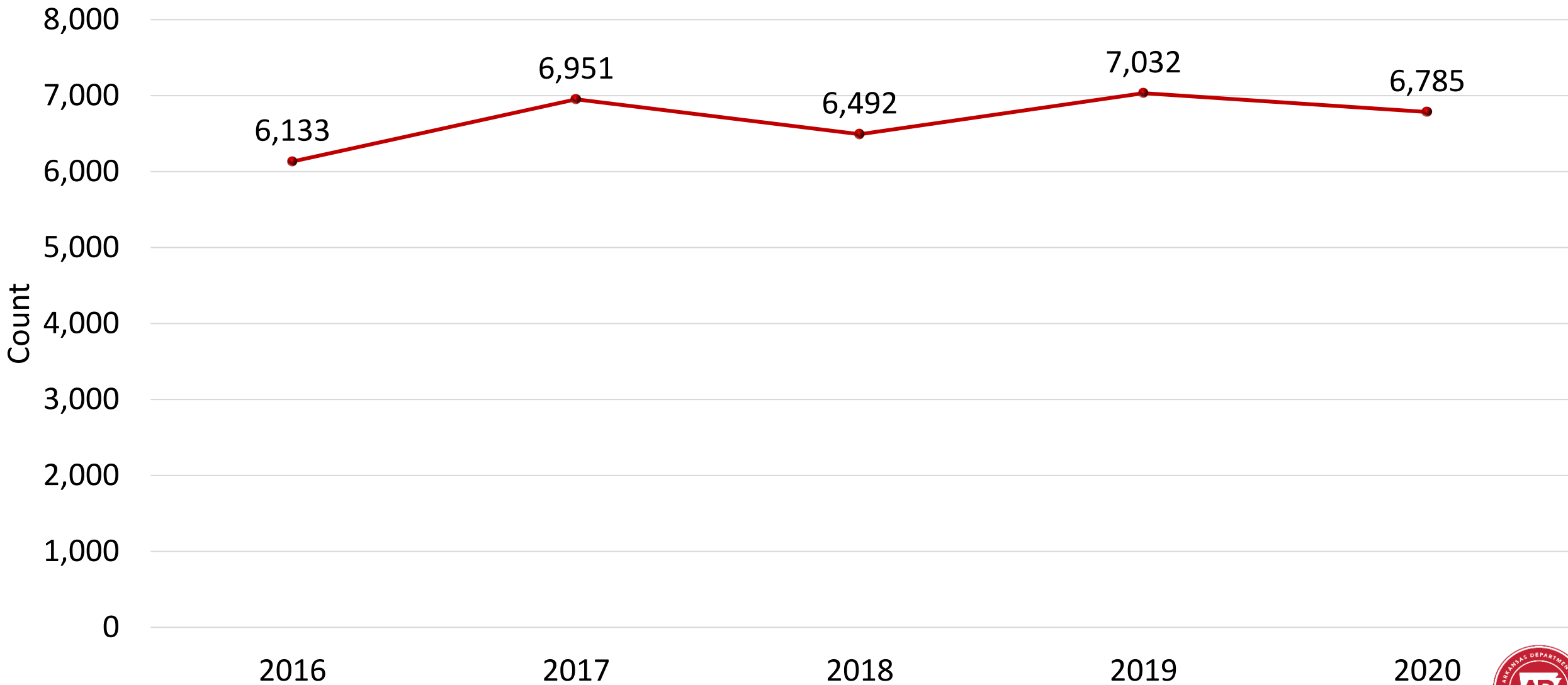
# Types of ASBDE Oral Health Professionals



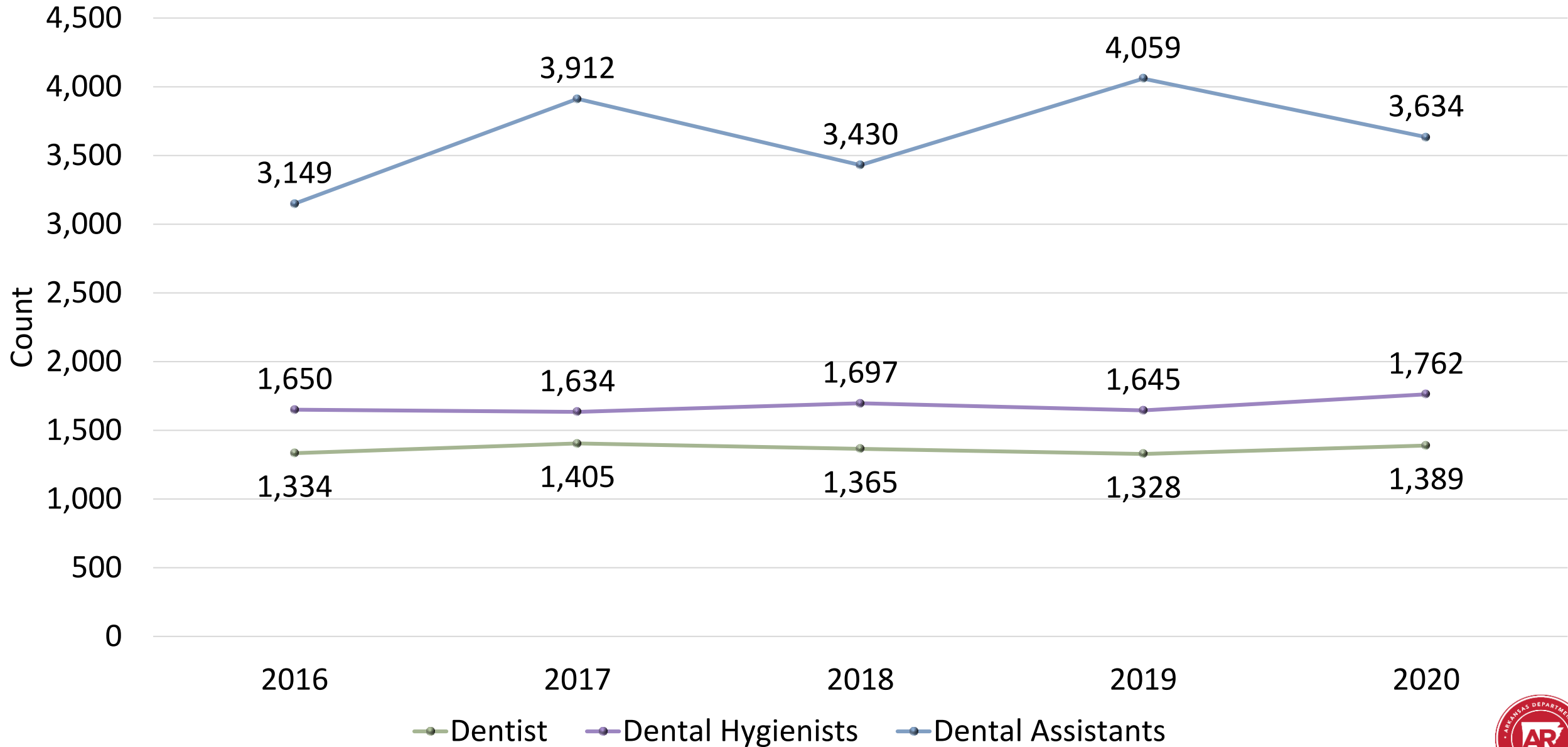
- **Dentists** – Dentists diagnose and treat problems with patients’ teeth, gums, and related parts of the mouth. They can apply for a license to practice in Arkansas if they meet examination and credential requirements.
- **Dental Hygienists** – Dental hygienists screen patients for signs of oral diseases, such as gingivitis, and provide preventive care. Like dentists, they can apply for a license to practice in Arkansas if they meet examination and credential requirements.
- **Dental Assistants** – Dental assistants provide patient care, perform x-rays, keep records, and schedule appointments. While dental assistants are not licensed like dentists and dental hygienists, they are **required to hold a current permit** from the ASBDE allowing them to perform dental radiography, coronal polishing, administration/monitoring of nitrous oxide (sedation monitoring) in the dental office. They are also commonly known as registered dental assistants and not to be confused with certified dental assistants.



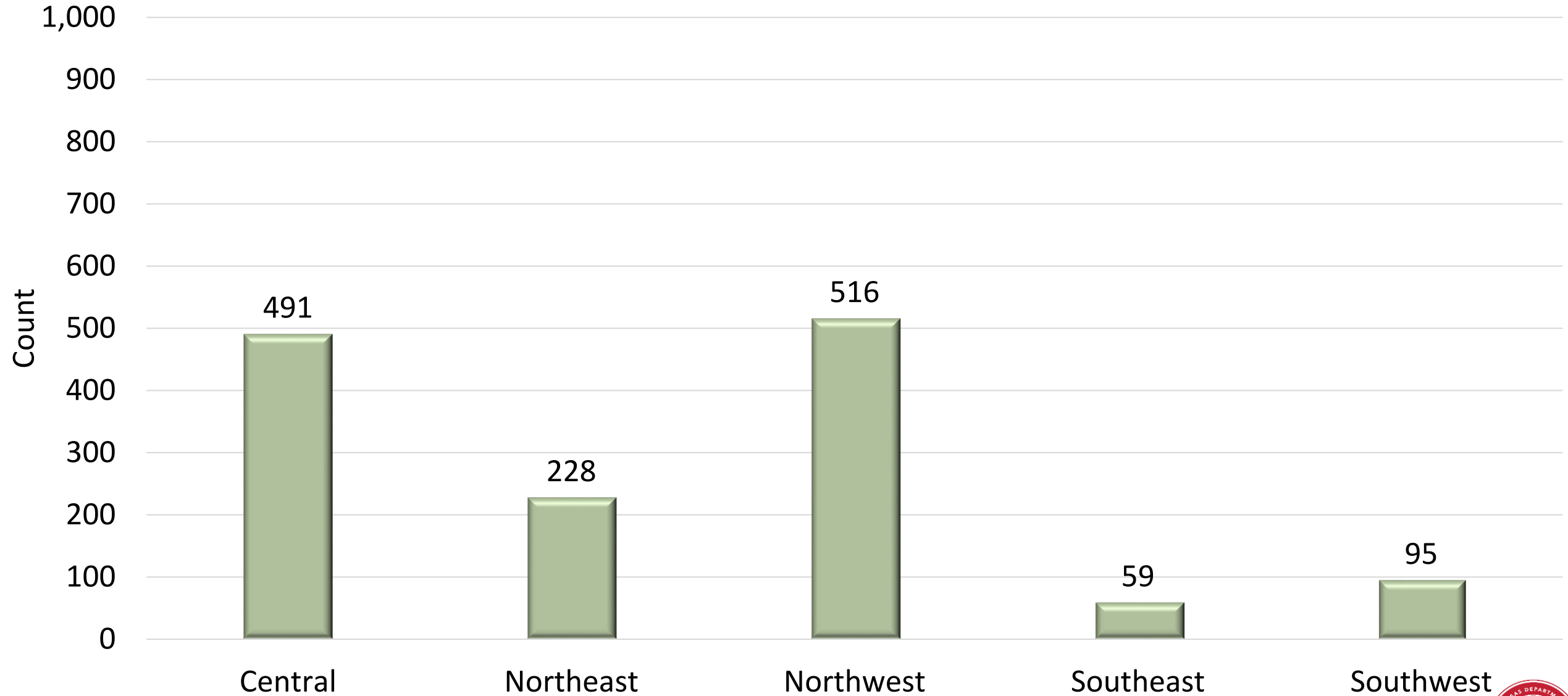
# Total Number of Dental Health Providers (Dentists, Dental Hygienists, and Dental Assistants) as Reported by ASBDE Licensures and Permits Arkansas, 2016 – 2020



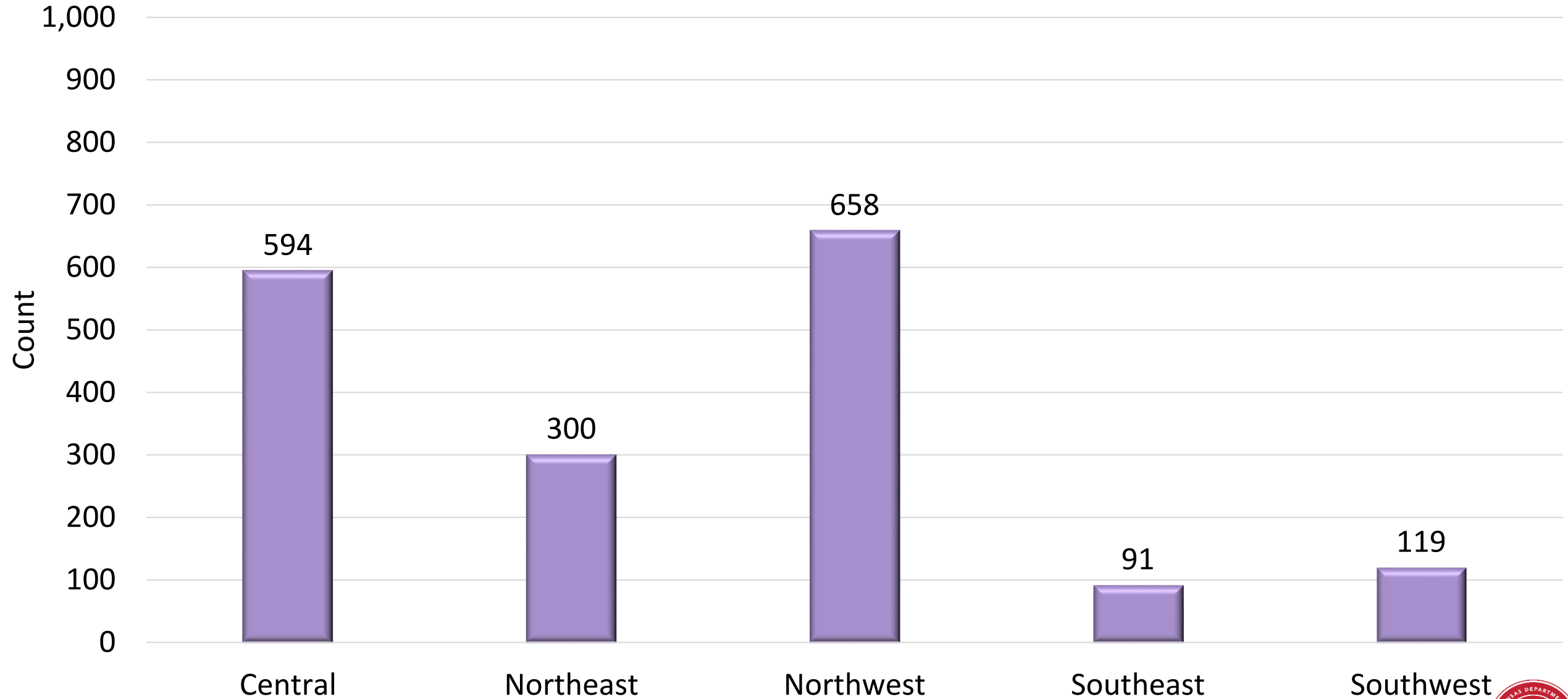
# Number of Dental Health Providers by Profession as Reported by ASBDE Licensures and Permits, Arkansas, 2016 – 2020



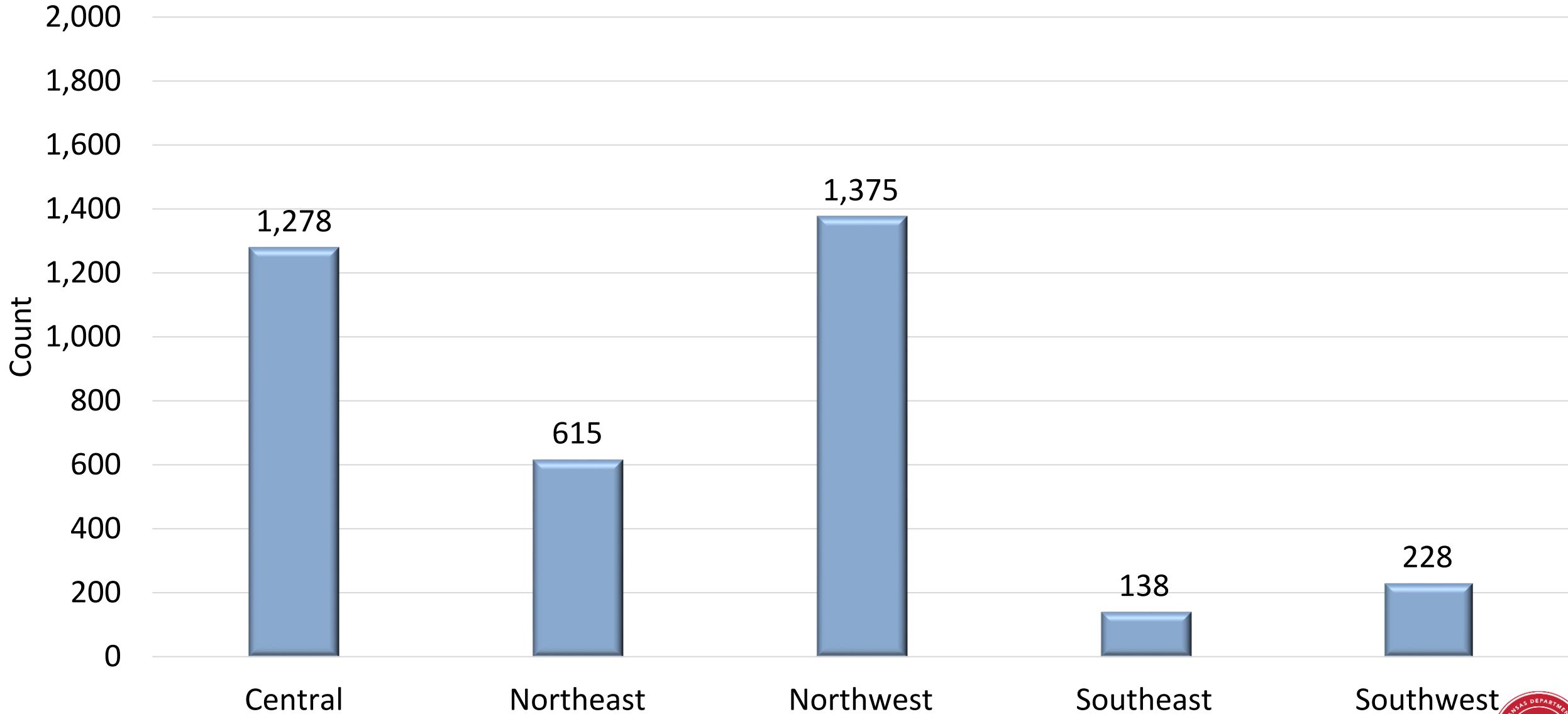
# Number of ASBDE Licensed Dentists by Public Health Region Arkansas, 2020



# Number of ASBDE Licensed Dental Hygienists by Public Health Region Arkansas, 2020



# Number of Dental Assistants with ASBDE Permit by Public Health Region Arkansas, 2020



# About Dentists in Arkansas

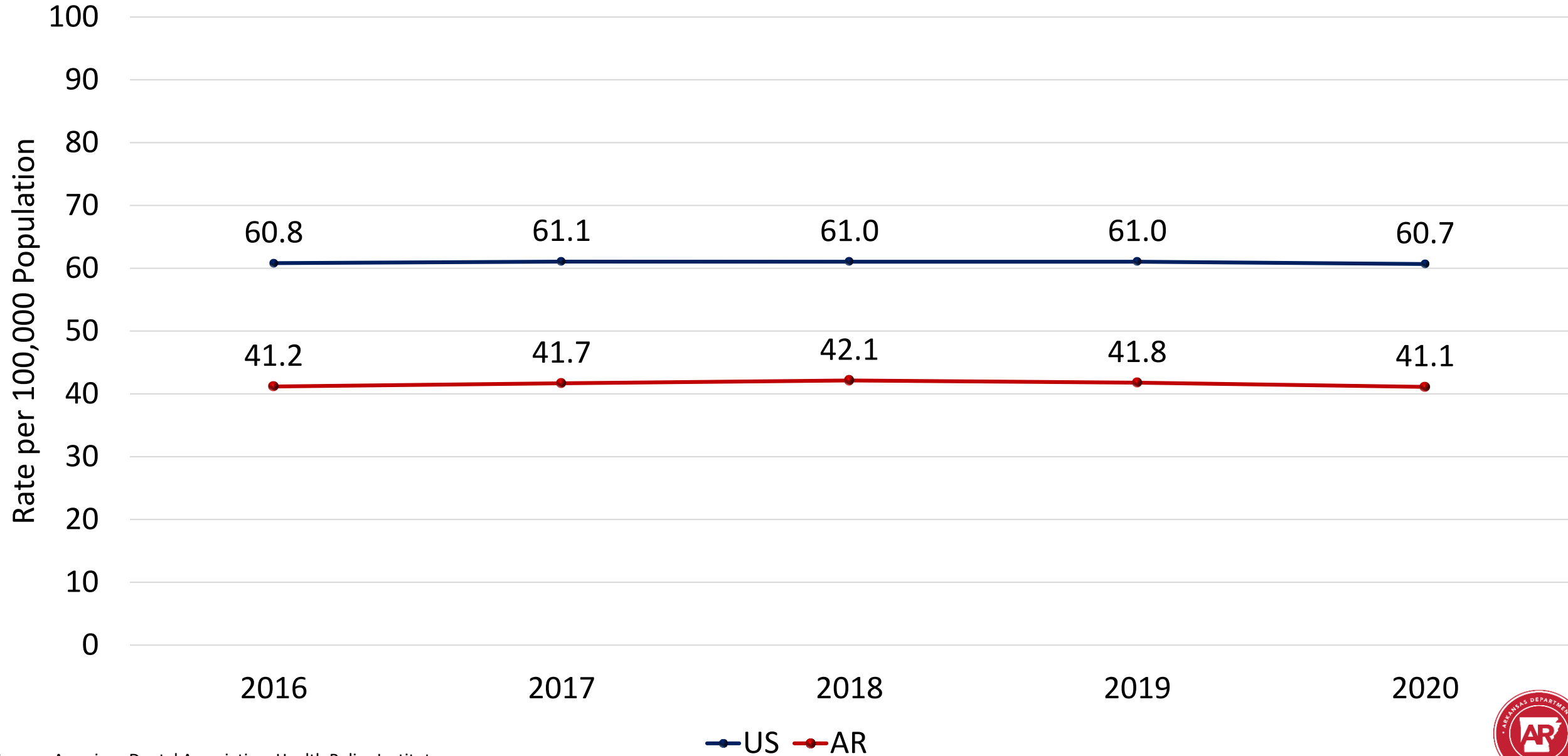
In 2019, most dentist were White males between the ages of 30 and 69 years.

About 61% of dentists in Arkansas participated in Medicaid or Children's Health Insurance Program (CHIP). During that same year, a review of the geographic distribution of dentists in Arkansas indicated that the following 6 counties did not have a dentist business address: Calhoun, Cleveland, Lafayette, Newton, Nevada, and Perry.

Unfortunately, Arkansas does not have a school to become a dentist. However, Arkansas residents interested can apply for financial assistance for attending certain dental school programs through grants offered by the Arkansas Department of Higher Education.

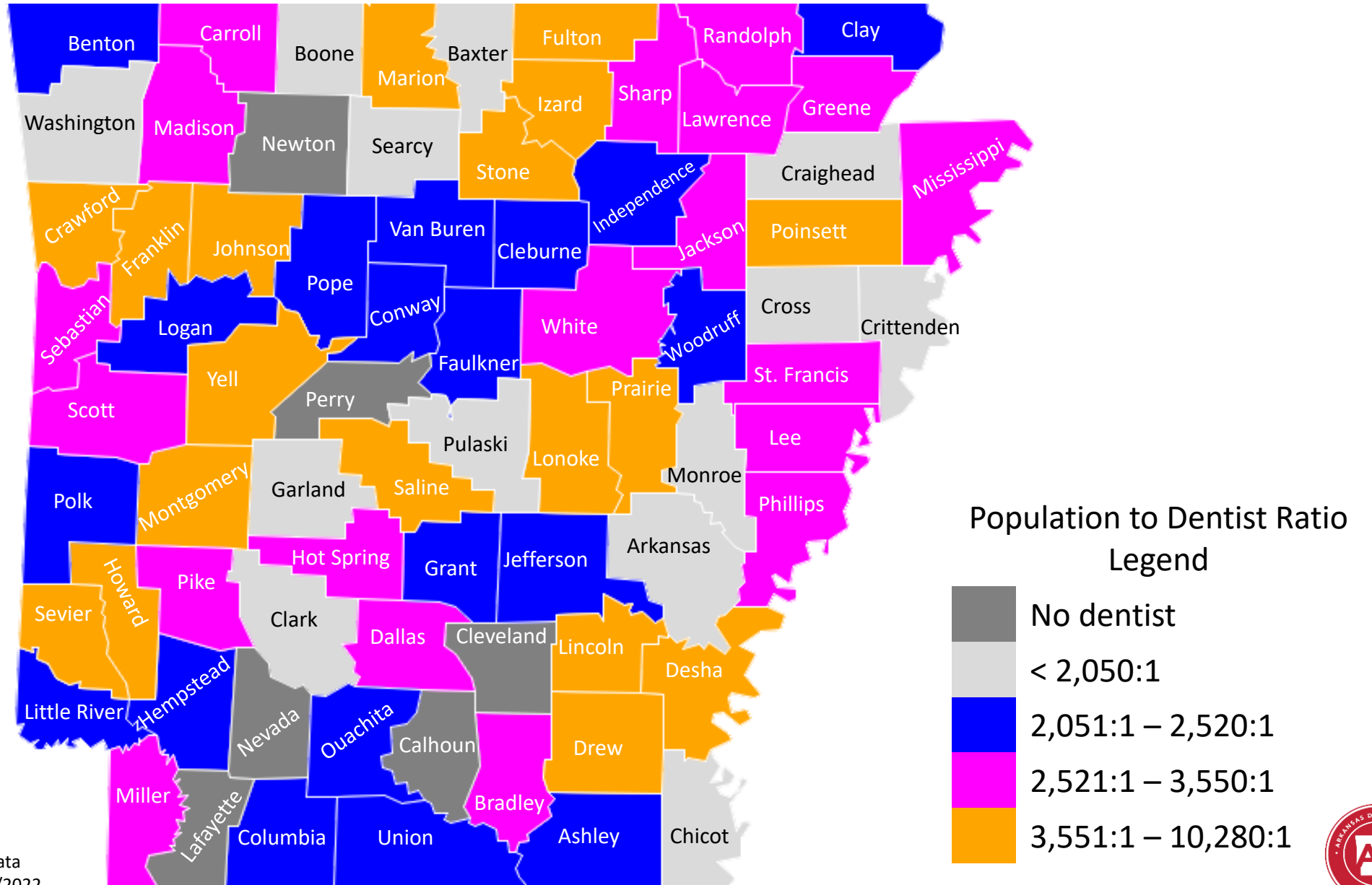


# Rate of Dentists per 100,000 Population, United States and Arkansas, 2016 – 2020



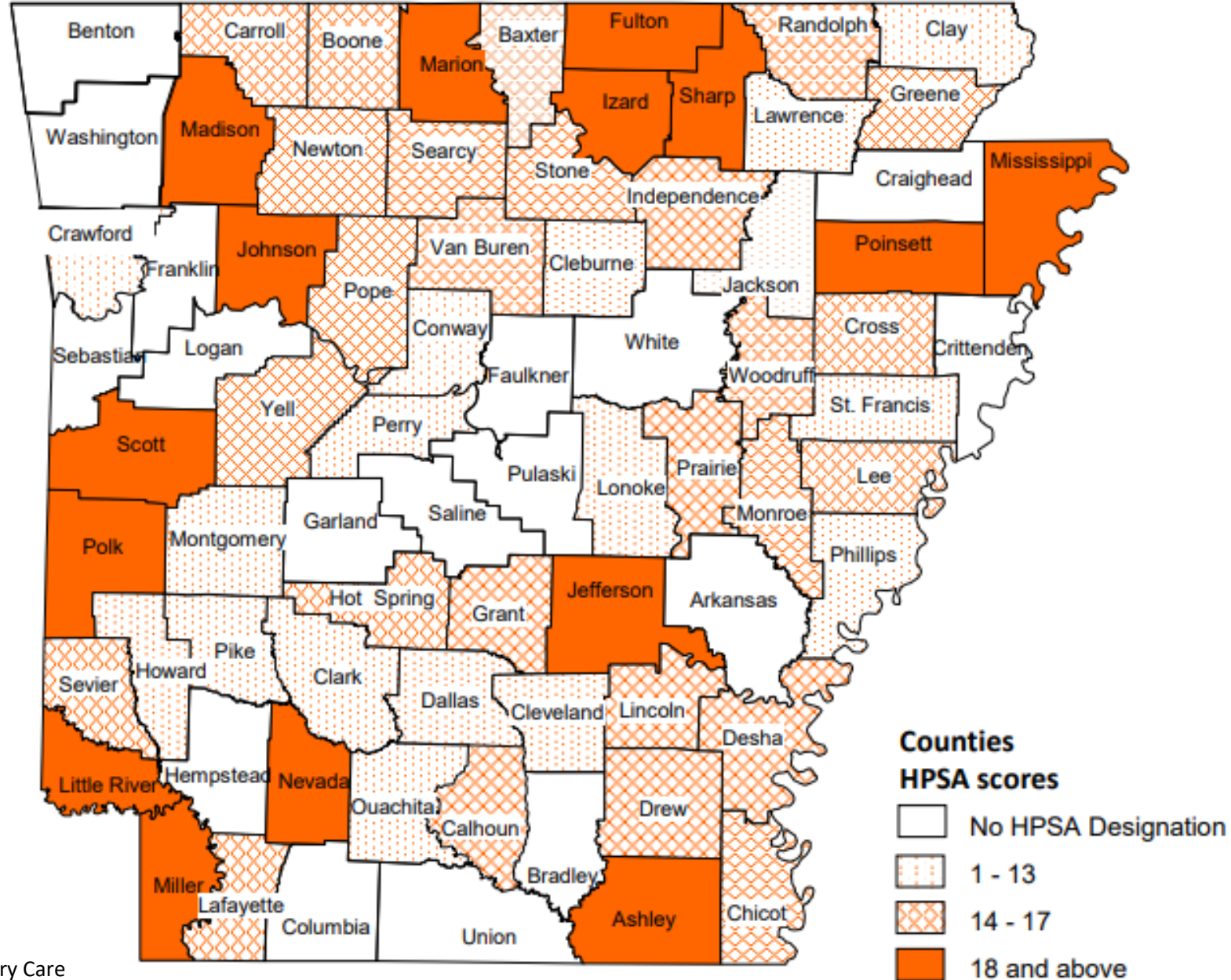
# Ratio of Population to Dentist by County

## Arkansas, 2019





# Map of Dental Health Professional Shortage Areas (HPSA) by County Arkansas, 2021



# School-Based Sealant Program & Health Centers

Section VIII

2019 – 2020



# Importance of Dental Sealants

The percent of children ages 5-19 in the US with untreated tooth decay is **two times higher for low-income households** compared to children from high-income households. Tooth decay left untreated can lead to pain and infections, and, ultimately, difficulties with speech and eating. However, timely delivery of **dental sealants** on permanent molars can prevent over 80% of cavities.

**School-Based Sealant Programs** are evidence-based programs implemented in schools as a form of preventive intervention in delivering **dental sealants**. Children at high-risk of untreated tooth decay and who are less likely to receive private dental care not only benefit from these programs that deliver sealants, but these programs help save money for overall dental care.



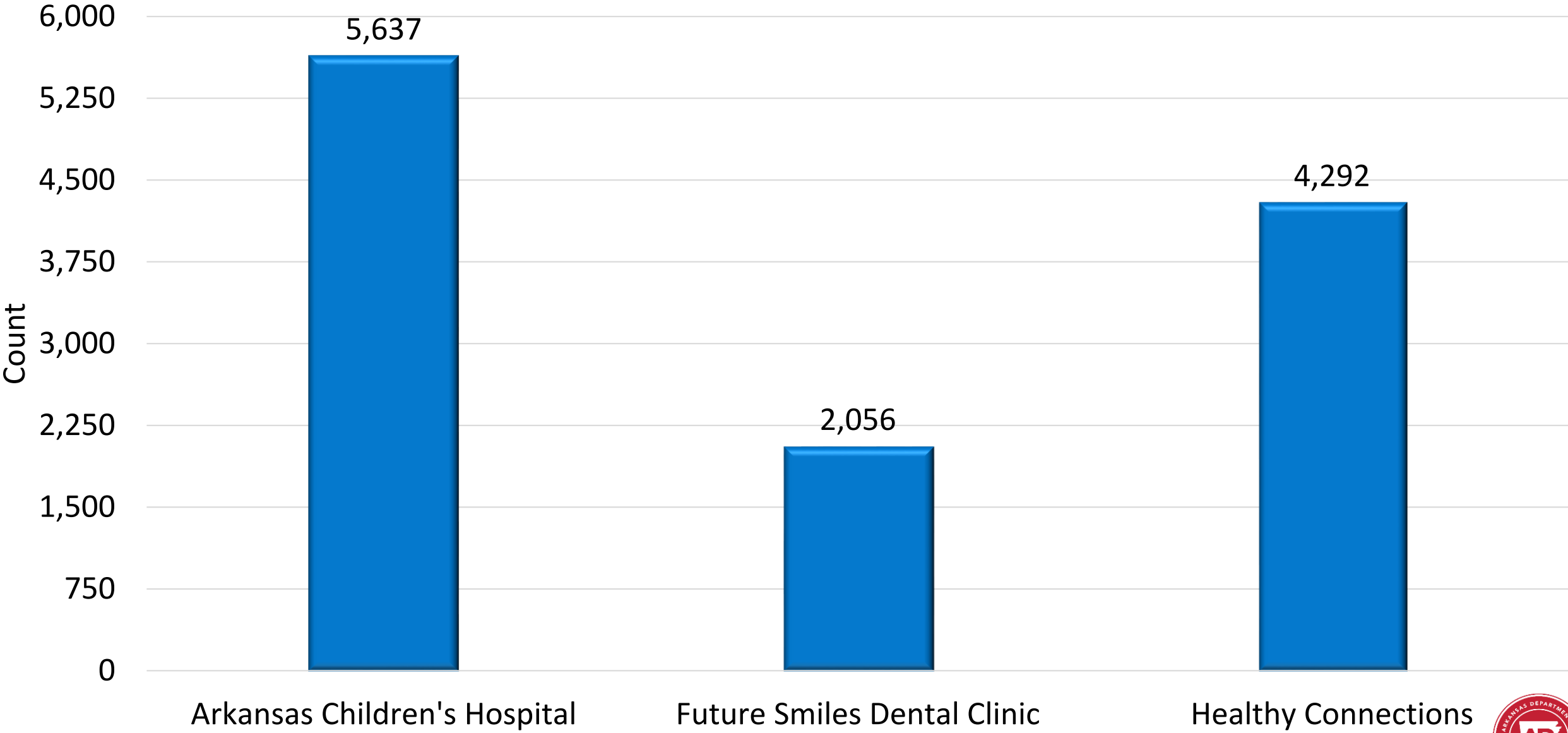
# About the School-Based Sealant Partners and Program in Arkansas

The Office of Oral Health initiated the Seal-the-State Program in 2007 with the support of a Daughters of Charity grant. The clinical services of Seal-the-State were later transferred to the Arkansas Children's Hospital, which became the primary provider of sealants throughout the state by 2009. Over time, partnerships were made with **Healthy Connections in Mena, Arkansas** and the **University of Arkansas at Little Rock (Future Smiles Dental Program)** to expand and provide sealants to children through **School-Based Sealant Programs**.

The goal of the program is to increase the number of eligible schools with dental sealant programs within Arkansas from 82 to 99 by August 31, 2023, which was reached during the 2020-2021 grant cycle of the CDC-1810. Working with our vendors, further expansion is hoped for, while addressing limitations that may be imposed by the ongoing pandemic issues.



# Total Number of Sealants Placed on Children by Partners Arkansas, 2019 – 2020



Source: ADH Office of Oral Health internal data



# About School Based Health Centers in Arkansas

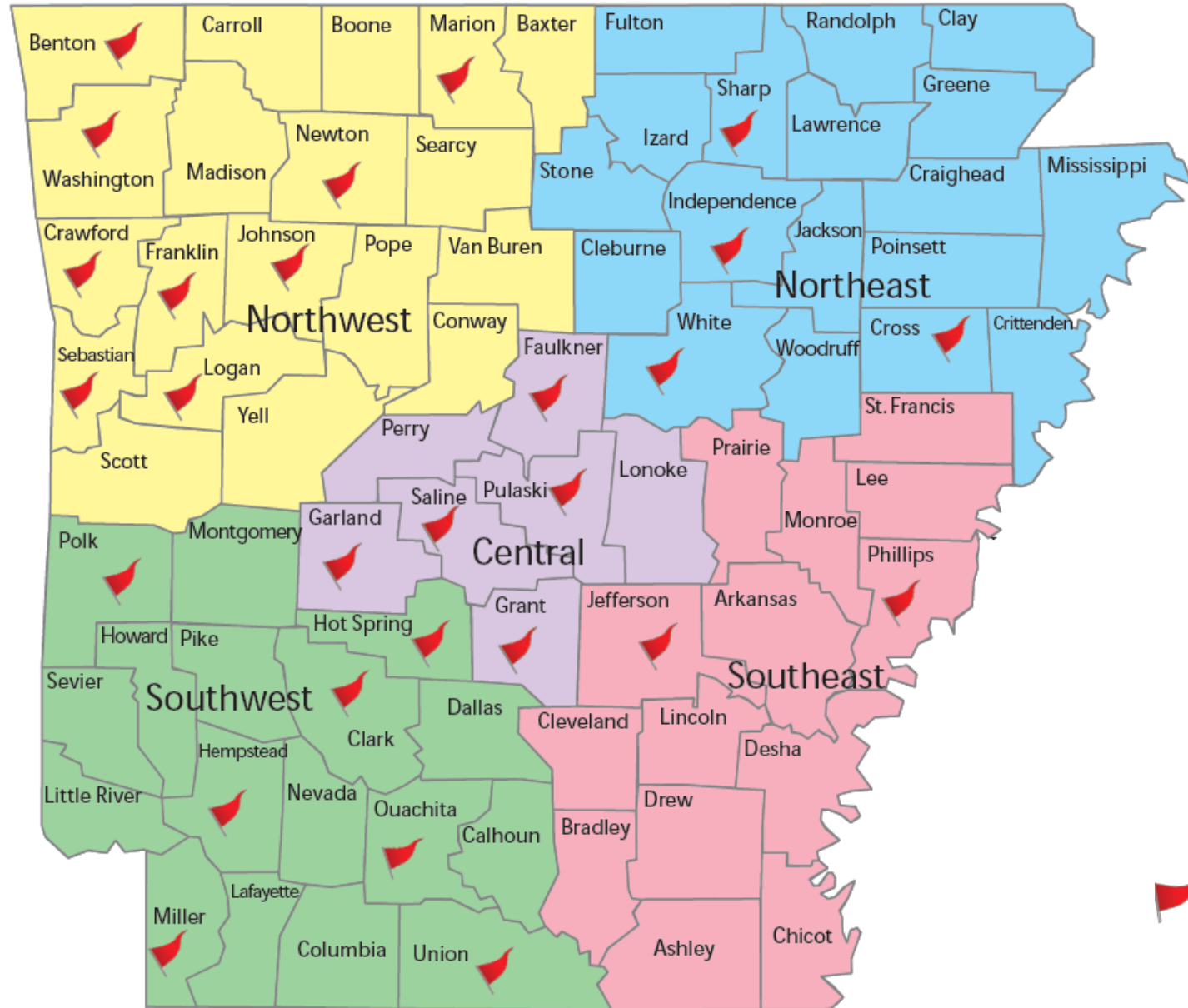
A School Based Health Center is a health care facility located in or next to a school. These facilities help provide students access to high-quality health care in a school environment that is safe and convenient since that is where they spend most of their day.

In Arkansas, there is a total of 54 School Based Health Centers.

<b>SBHCs Providing Dental Services by Funding Source</b>	
<b>Total number of SBHCs with dental services</b>	<b>19</b>
<b>Federally/Privatey Funded</b>	<b>4</b>
<b>Arkansas Department of Education Funded</b>	<b>15</b>



# School Based Health Centers (SBHC) by Public Health Region Arkansas, 2020-2021



 SBHC Location



Source: School-Based Health Alliance of Arkansas

# Community Water Fluoridation

Section IX

CWF 2021





# What is fluoride?

Fluoride is a naturally occurring mineral that is released from rocks into the soil, water, and air.

It can be found in:

- Toothpaste
- Drinking water
- Beverages and foods processed with fluoridated water
- Dietary prescription supplements such as tablets or drops
- Other dental products such as mouth rinses, gels, and foams

Fluoride is naturally present in some foods such as bananas, avocados, coffee and shrimp.



# Why is fluoride important for good oral health?

Studies have shown fluoride stops the tooth decay process by keeping the tooth enamel (outer layer of tooth) strong and solid. It has helped decrease the prevalence and severity of tooth decay in the United States. Fluoride has also been shown to help re-mineralize the tooth enamel and, consequently, prevent tooth decay.

Adding fluoride to community water is a safe, inexpensive, and effective method of preventing tooth decay. By drinking fluoridated water, children and adults can reduce tooth decay by about 25%.

Because of its contribution to the large decline in tooth decay in the United States since the 1960s, CDC named community water fluoridation one of 10 great public health achievements of the 20th century.



# Why is fluoride added to community drinking water?

Fluoride is added into community water to reach those communities with limited access to oral health prevention services. It is considered safe at 0.7 parts per million (0.7mg/L) and reaches all age groups.

Community fluoridated water is also a cost-effective practice and every dollar spent on community water fluoridation saves up to \$38 in treatment costs for tooth decay in the U.S. As part of its public health effort to reduce tooth decay, Arkansas pushed for a health policy to fluoridate water systems supplying 5,000 people or more as a health prevention method known as Act 197.



# Community Water Fluoridation in Arkansas (Act 197, 2011)

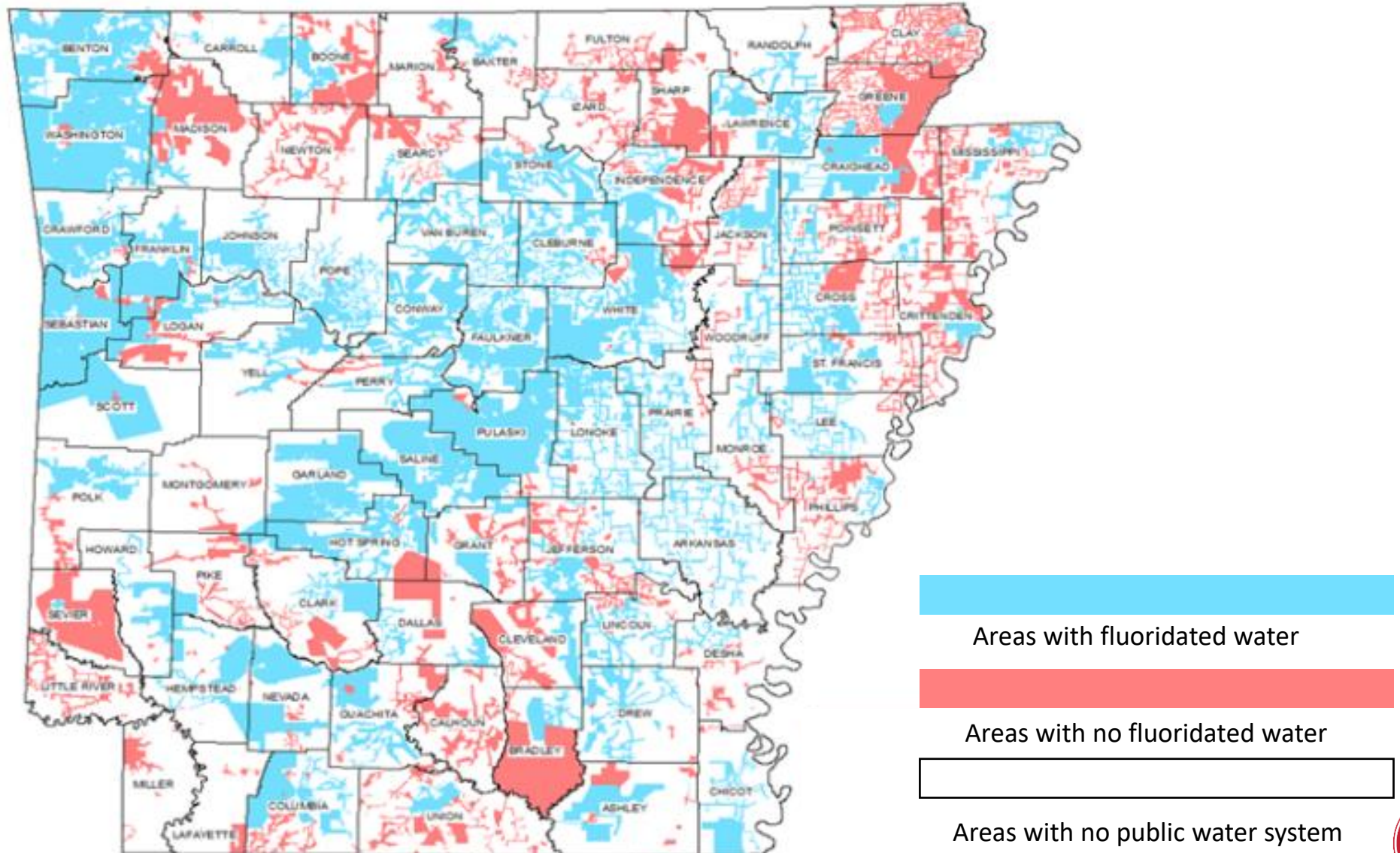
As an effort to promote tooth decay preventative methods, Arkansas passed Act 197 in 2011 in order to improve community water fluoridation. This law required public water systems serving 5,000 or more customers to add fluoride to their water. This mandate directly affected 35 non-fluoridating public water systems of this size across the state.

This policy was made possible by Arkansas Department of Health and Delta Dental Foundation of Arkansas. Delta Dental Foundation of Arkansas, which is dedicated to help reducing dental disease in Arkansas, pledged funding to purchase fluoridation equipment for 34 water systems.

To date, 33 of these systems have initiated water fluoridation which led to 86% of Arkansans benefiting from optimally fluoridated drinking water.



# Fluoridated Public Water Systems Arkansas, 2021



# Paint A Smile Program

Section X

PAS 2016 – 2021 FY



# What is fluoride varnish?



Fluoride varnish is a sticky semi-liquid, made of 5% sodium fluoride (NaF) mixed with alcohol, in a resin base. Most fluoride varnish is composed of fluoride, calcium, and phosphate, which are all-natural minerals found in saliva and necessary for strong tooth enamel (the outer layer of teeth).

Research has shown topical fluoride varnish adheres to teeth **preventing, slowing, or stopping early caries** from progressing. It is a safe, quick, and easily applied tooth decay preventative.

Application of topical fluoride involves using a small brush to paint the varnish on the surfaces of the tooth. It initially feels sticky, but then solidifies after coming into contact with saliva.

# Who can apply topical fluoride varnish? (Act 90, 2011)

Application of topical fluoride varnish **does not require a dentist to be present.**

Research has shown **medical providers tend to serve as the first line of defense** against tooth decay for children, rather than dentists. For that reason, Arkansas legislature passed **Act 90 in 2011** authorizing any licensed health care provider the right to apply fluoride varnish to a child's teeth after appropriate training and certification by the Arkansas Department of Health Office of Oral Health. |

In an effort to promote fluoride varnish and support Act 90, the ADH Office of Oral Health, in partnership with University of Arkansas for Medical Sciences and Local Health Units, initiated the **Paint A Smile Program in 2015.**





# About the Paint A Smile Program

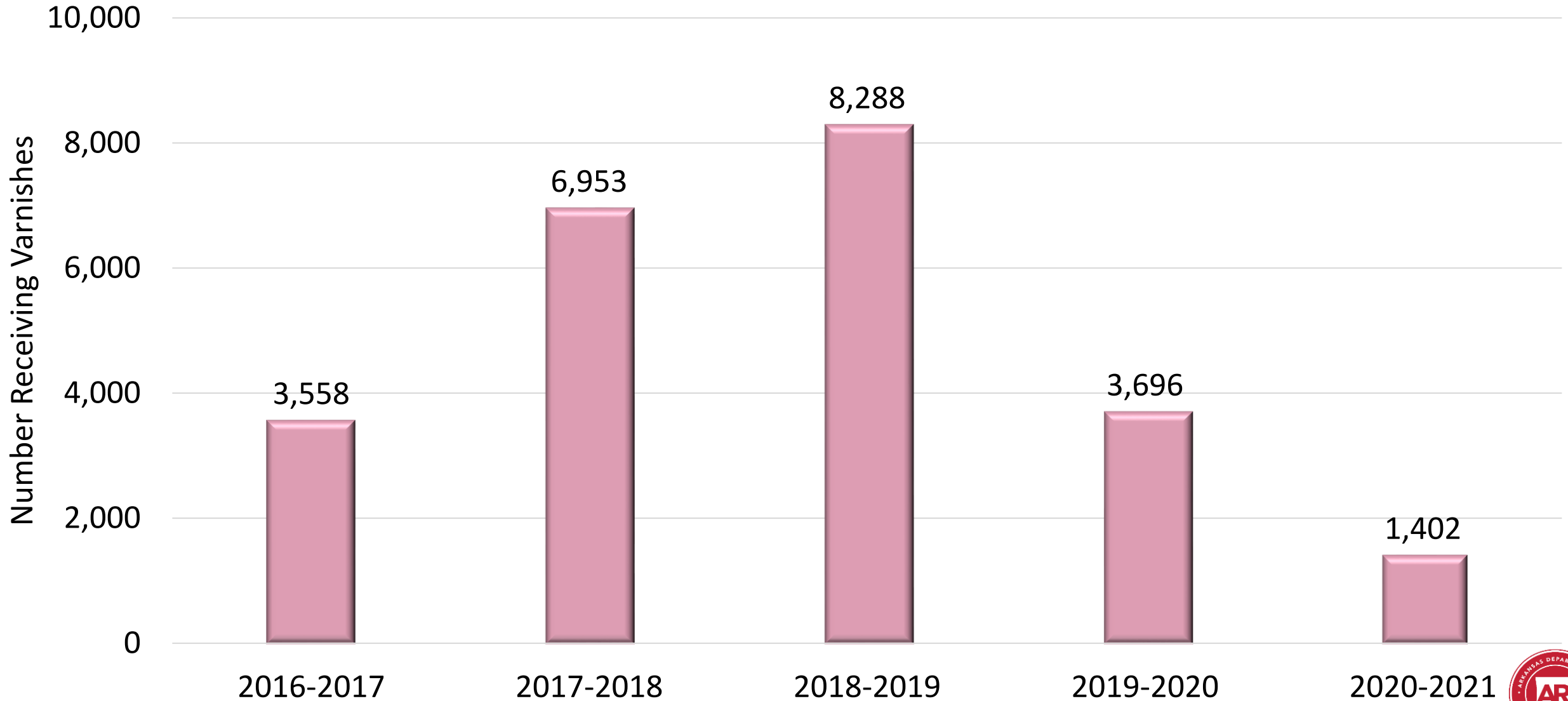
The **Paint A Smile** program currently works with 75 ADH Local Health Units as well as other interested medical facilities in Arkansas. The program provides education, trainings and certifications for fluoride varnish applications by request as part of its **medical-dental integration** initiative.

The purpose of the program is to increase involvement of non-dental health professionals to reduce the barriers in accessing dental care for all Arkansas children, with the following goals:

- Closing the gap for children who do not have regular access to comprehensive dental care
- Reducing the risk of tooth decay for early childhood children
- Initiate a referral to a dental home for routine care and treatment
- Educate caregivers about tooth decay and prevention



# Number Receiving Fluoride Varnishes at a Local Health Unit through the Paint A Smile Program Arkansas, 2016 – 2021



Source: ADH Office of Oral Health internal data



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# Description of Data Sources

- **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. It 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.
- **National Survey of Children’s Health (NSCH)** – The National Survey of Children’s Health is a national telephone survey conducted by the CDC, National Center for Health Statistics. It is sponsored by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The survey is designed to: (1) estimate national and state-level prevalence for a variety of child health indicators; (2) generate information about children, families, and neighborhoods to help guide policymakers, advocates, and researchers; (3) provide baseline estimates for federal and state performance measures, Healthy People 2020 objectives, and state level needs assessments, and (4) complement the National Survey of Children with Special Health Care Needs (NS-CSHCN). The NSCH provides a broad range of information about children’s health and well-being collected in a manner that allows comparisons among states as well as nationally.
- **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 in order 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.



# Description of Data Sources (continued)

- **Arkansas Basic Screening Survey (ArBSS)** – The Arkansas Basic Screening Survey follows ASTDD’s Basic Screening Survey Tool in screening 3<sup>rd</sup> grade students for the 4 following topics: (1) Decay Experience, (2) Untreated Decay Experience, (3) Presence of Dental Sealants, and (4) Dental Treatment Urgency. The Basic Screening Survey tools were developed to assist state and local public health agencies monitor the burden of oral disease at a level consistent with the Healthy People objectives. The BSS tools were not designed to measure small changes in disease levels and are probably not appropriate for use in oral health research. Likewise, many of the tools used to evaluate and measure oral health in the research setting are too costly and not appropriate for oral health surveillance activities. The Office of Oral Health worked with local partners in order to collect oral health conditions from participating schools and students whose parents consented for their child to participate. However, methods for each ArBSS differed for selected years and caution should be used in interpreting the results. To read the 2019-2020 ArBSS report, visit: <https://www.healthy.arkansas.gov/programs-services/topics/oral-health-surveillance>
- **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.
- **Dental Health Professional 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.



The End