



MISSISSIPPI DATA PROJECT

CHILD HEALTH



REPORT
OCTOBER 2022



INTRODUCTION

In Mississippi, there are approximately 377,225 children between the ages of 0-9. According to the U.S. Census Bureau, these children make up about 12.6% of the population.¹ Repeatedly, research shows that the first years of a child's life establish the foundation for their future health, development, and success.²

All children deserve to have their basic health needs met. These needs include access to high-quality, affordable healthcare, including pediatric dentists and mental health providers, nutritious food, quality childcare, and immunizations. Long-term effects from the lack of access to these basic needs are evident across the country, mainly in low-resourced communities.

NOTICEABLE CHANGE

2016-2020 population estimate shows a **26,113 decrease** in the 0-9 yr old population from the 2011-2015 American Community Survey estimates of 403,338.

In states like Mississippi, which are rural and have pockets of extremely high poverty (12%), children are especially vulnerable.³ Overall, 28% of children in Mississippi are growing up in poverty

NOTICEABLE CHANGE

From 2015 to 2019 there was a **3% decrease** in the number of MS children growing up in poverty. Also, the percent of MS population in extreme poverty has decreased from 17% to 12% since 2015.

- one of the greatest threats to child development.⁴

"Poverty is an important social determinant of child health...Child poverty is at the intersection of multiple systemic forces, including racism, discrimination, climate change, health, and economic progress. Research shows that living in poverty can have lifelong health consequences."⁵

"Poverty is an important social determinant of health and contributes to child health disparities"

-American Academy of Pediatrics



This brief provides an updated overview of several major health topics for Mississippi's children. Topics include pediatric oral and mental health, child mortality and the status of pediatricians in the state. Significant data changes since 2017 are also highlighted.

County Health Rankings In Mississippi

This map shows the degree of best to worst health ranking outcomes of each of Mississippi's 82 counties. The counties are ranked based on summaries of various health outcome measures (Appendix A) using county-level data from national and state data sources. ⁶ Comparing the current best and worst county health outcome rankings to 2017 data reveals little change.

During both periods, counties that received the lowest health rankings are clustered in the Mississippi Delta and the southwestern part of the state.

2022 Best & Worst Outcome Rankings

Best

Madison
Lafayette
Rankin
Lamar
Desoto

Worst

Leflore
Quitman
Humphreys
Coahoma
Holmes

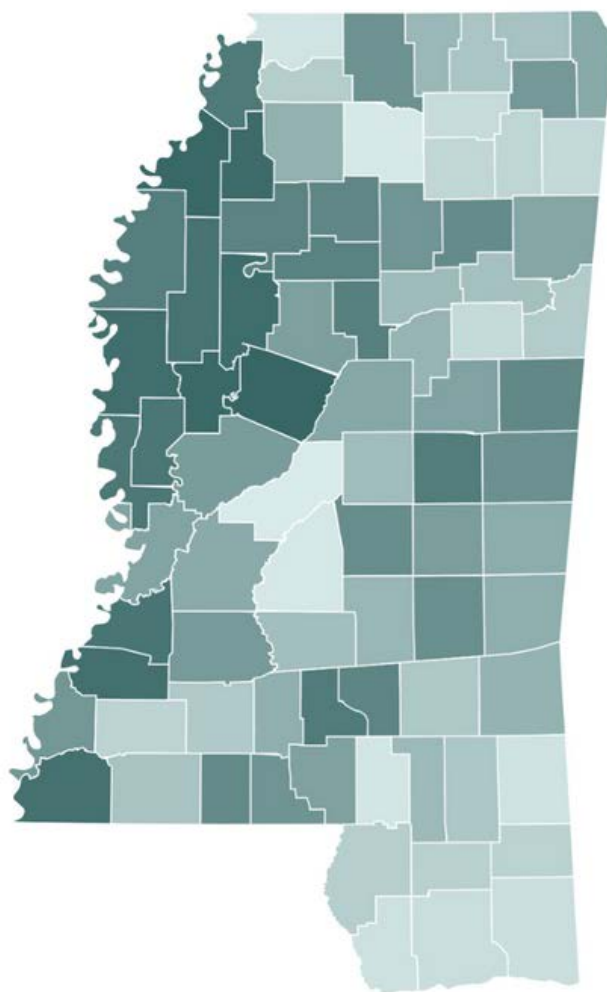
2017 Best & Worst Outcome Rankings

Best

Desoto
Rankin
Lamar
Lafayette
Madison

Worst

Coahoma
Holmes
Jefferson
Humphreys
Jefferson Davis



2022 County Health Outcomes Rankings

Best  Worst

Children in Poverty In Mississippi

The intersection of child poverty and health outcomes is clearly highlighted by comparing a map of health outcome rankings to a map of child poverty rankings. It is evident that the counties with the worst health outcome rankings are also those with the highest rates of child poverty.

When comparing the latest child poverty data (2020) to the 2015 data, there is little change in the list of counties with the lowest and highest rates of child poverty.

2020 Lowest & Highest Child Poverty Rates By County

Lowest

Rankin

DeSoto

Madison

Lamar

Lafayette

Highest

Coahoma

Issaquena

Humphreys

Jefferson

Sharkey

2015 Lowest & Highest Child Poverty Rates By County

Lowest

Desoto

Rankin

Madison

Lafayette

Lamar

Highest

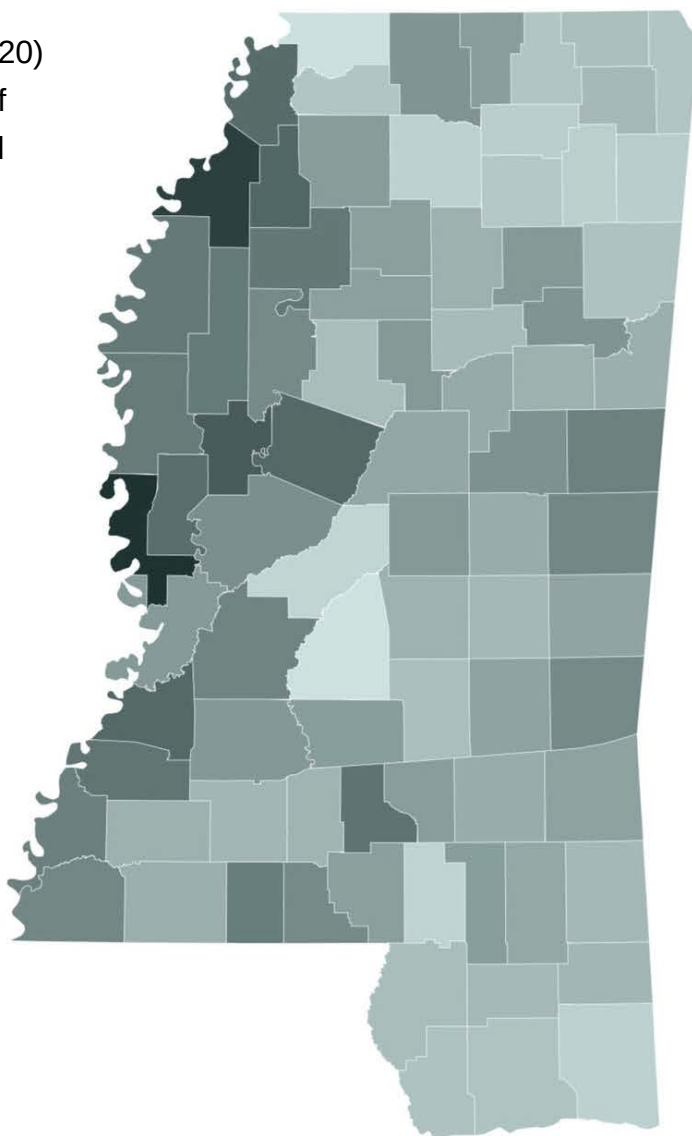
Humphreys

Quitman

Leflore

Claiborne

Sharkey



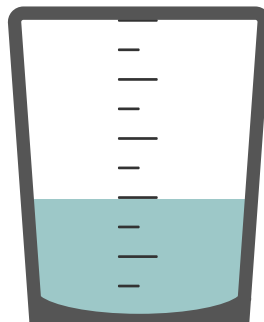
2020 Child Poverty Rates (Ages 0-17)

Lowest  Highest

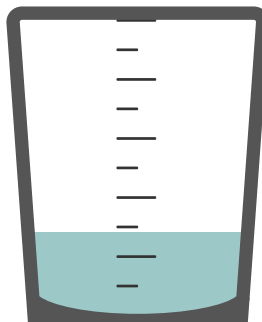
Pediatric Oral Health In Mississippi

The Centers for Disease Control and Prevention (CDC) lists tooth decay as one of the most common chronic childhood diseases in the United States.⁸ Oral disease can impact a child's health by leading to problems with eating, speaking, and learning.⁹ Three times more children are affected by tooth decay than obesity and four times more than asthma.¹⁰ Research shows that children from low-income families are more likely to have cavities than children from higher-income families.¹¹

Population Lacking Access to Fluoridated Water



Mississippi
39.3%



United States
27%

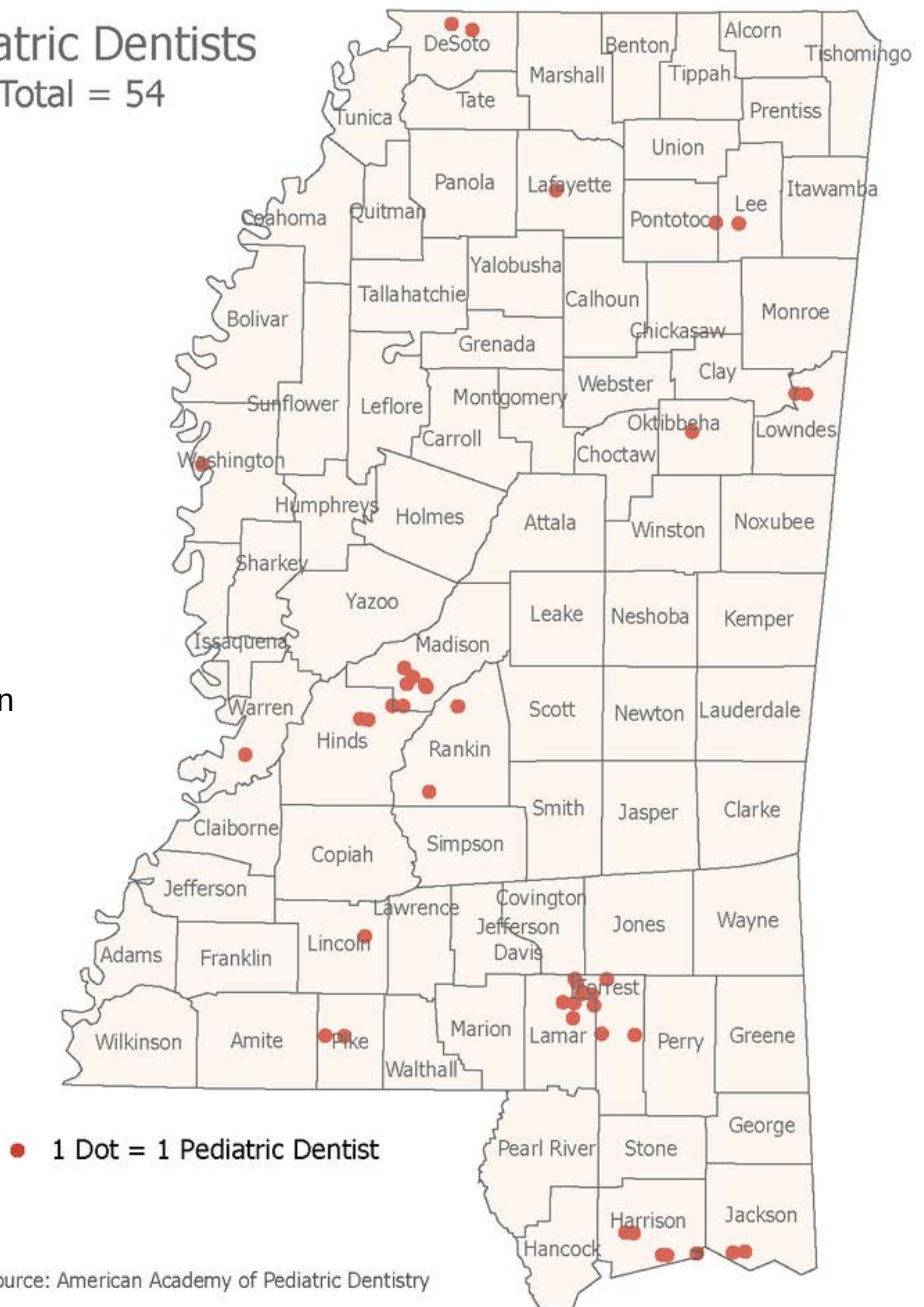
Community water fluoridation is one of the ten great public health achievements of the 20th century.¹² According to the CDC, fluoridated water keeps teeth strong and reduces tooth decay in children by¹³ 25%. In 2018, 39.3% of Mississippi's population served by community water systems were not receiving fluoridated water compared to 27% nationally.¹⁴

Not only does less tooth decay support better child health outcomes, but it also makes a positive economic impact. Research shows that dental costs are lower in areas with water fluoridation. Every \$1 invested into community water fluoridation results in savings for communities ranging from \$1.12 to \$135.¹⁵



Pediatric Dentists Total = 54

There are 54 pediatric dentists in the state of Mississippi, according to the American Academy of Pediatric Dentistry website. This is only an increase of two dentists since 2015. Pediatric dentists are often clustered in areas of higher population with the majority being in the Metropolitan Jackson, Hattiesburg, and Gulf Coast areas. Out of the 82 counties in the state, 65 counties have no pediatric dentists at all. ¹⁶



Not only does Mississippi have few pediatric dentists, but it is also experiencing a shortage of general dentists. The Health Resources and Services Administration (HRSA) has designated 32 locations in Mississippi as Health Professional Shortage Areas (HPSAs). Of those locations, 30 are designated as High Needs Geographic HPSAs.

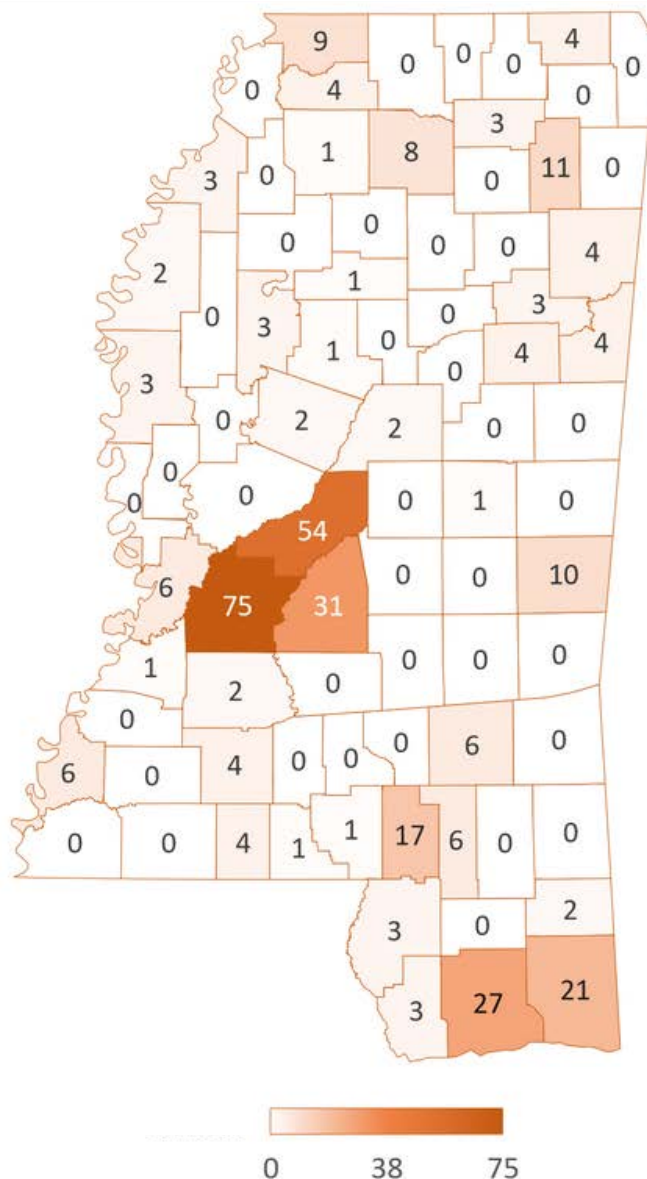
HRSA recommends the dentist to population ratio be at least 5,000 to 1. If the area has unusually high needs, they recommend a ratio of 4,000 to 1.¹⁷

Pediatricians In Mississippi

In 2017, we reported in our Child Health brief that there were 213 practicing pediatricians in the state of Mississippi. This was based on personal communication with the executive director for the Mississippi Chapter of American Academy of Pediatrics at that time.

In 2020/21 the Health Resources and Services (HRSA) Area Resource Files indicated that there are now 353 pediatricians in Mississippi. As the map indicates, much like other valuable resources, the largest number of pediatricians are clustered around the areas with a higher population while 42 counties have no pediatrician at all.

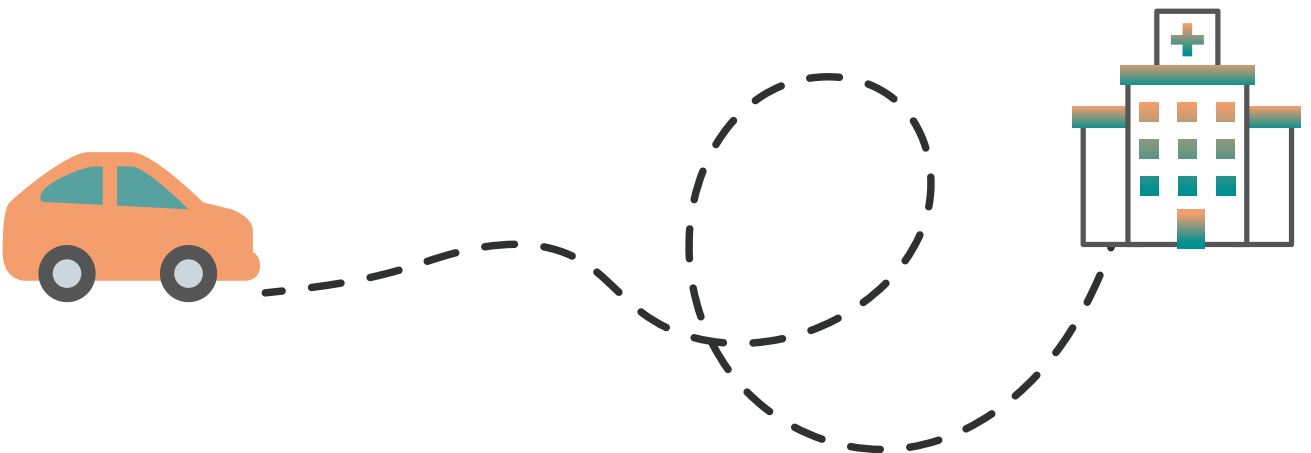
MS Pediatricians, 2020-21





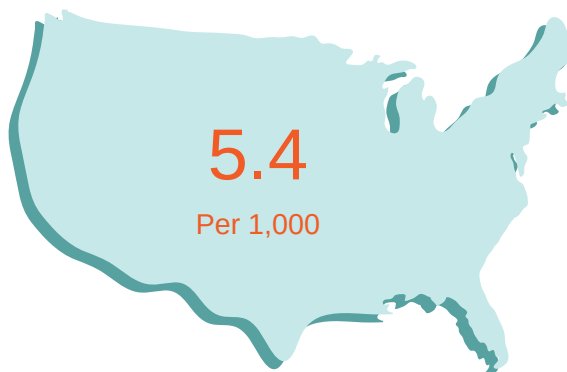
Slightly more than half (42) of the 82 counties in Mississippi do not have any pediatricians at all.

The shortage of pediatricians in Mississippi is compounded when examining pediatric subspecialty physicians. According to the American Academy of Pediatrics, 22.6% of Mississippi children have special health care needs compared to 13.5% nationally. Families often have to travel long distances to receive pediatric subspecialty care for their child. For example, a Mississippi child with juvenile arthritis must travel an average of 64 miles and as much as 145 miles to see a pediatric rheumatologist.¹⁹



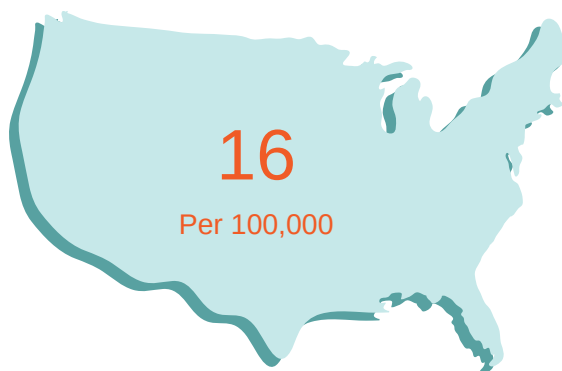
Infant & Child Mortality In Mississippi

INFANT Mortality Rate, 2020 (Before the first birthday)



Infant mortality is the death of an infant before the first birthday. The Centers for Disease Control and Prevention reports that the national infant mortality rate for 2020 was 5.4 deaths per 1,000 live births.²⁰ According to the Mississippi State Department of Health (MSDH), the infant mortality rate in 2020 in Mississippi was 8.3 infant deaths per 1,000 live births.²¹ Mississippi has the highest rate of infant mortality in the United States.²² There has been very little change in this rate for Mississippi in recent years. In 2017, the infant mortality rate for Mississippi was 8.73 deaths per 1,000 live births.

CHILD Mortality Rate, 2020 (Between ages 1 and 14 from all causes)²³



Mississippi's child death rate is almost twice the national rate. It has increased since 2015 from 28/100,000 to 31/100,000. The national rate of 16 deaths/100,000 has stayed the same.²⁴

Child Mental Health

In October of 2021, the American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association issued a joint declaration of a national state of emergency on children's mental health. The declaration stated that rates of childhood mental health concerns and suicide rose between 2010 and 2020, this already dire situation was then compounded with the impacts of the COVID-19 pandemic and the inequities of structural racism on communities of color.²⁵

There is a national emergency in child and adolescent mental health.

The earlier we act, the better.

According to the Centers for Disease Control and Prevention Children's Mental Health, 1 out of 6 children in the U.S. aged 2 – 8 years old (17.4%) is diagnosed with a mental, behavioral, or developmental disorder.²⁶ An early diagnosis and referral to appropriate treatment and services can make a positive impact on the outcomes of the lives of children with mental disorders and their families.²⁷

In a 2022 report from Mental Health America that ranked mental health data points across all 50 states and the District of Columbia, the following rankings for Mississippi were reported.²⁸

- 16th** in prevalence of mental illness in youth
- 47th** in access to mental health care
- 44th** in mental health workforce availability

There is work to be done in Mississippi to address mental health care.

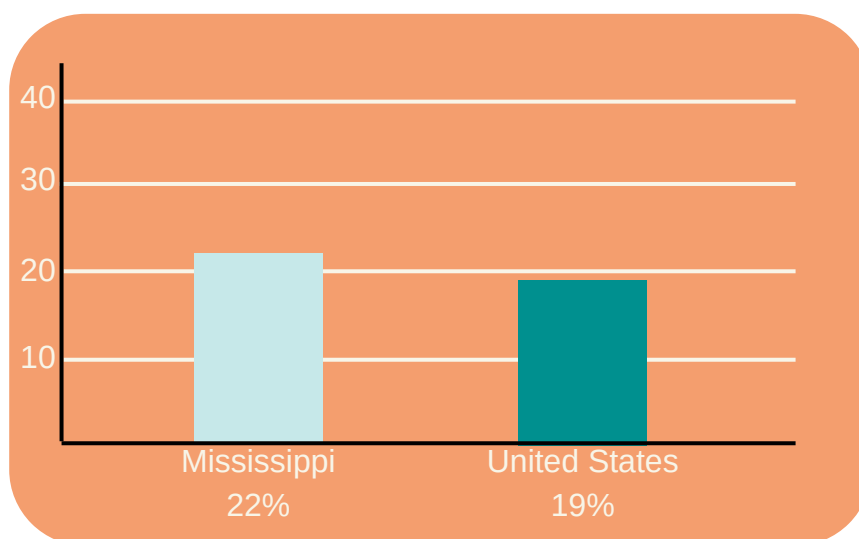
ACEs In Mississippi

Adverse Childhood Experiences (ACEs) include physical and emotional abuse, neglect, caregiver illness, household violence, and more. The more a child is exposed to ACEs, the more their stress-response system is activated. This toxic stress can negatively impact their physical, mental, and developmental health.²⁹

**Mississippi
children are more
likely to have
adverse
experiences.**

The National Survey of Children's Health (2017/18) showed that in the U.S., 23% of children ages birth to 17 experience one ACE, and 19% experience two or more.

In Mississippi those statistics are higher with 28% of children experiencing one ACE and 22% experiencing two or more.³⁰



Children
experiencing two or
more adverse
experiences
(ages birth to 17)

School Nurses In Mississippi



1:1,063

School nurse to student ratio in Mississippi (2019)

According to the Mississippi Department of Education (MDE), in 2019 there was one school nurse to every 1,063 students in Mississippi.³¹

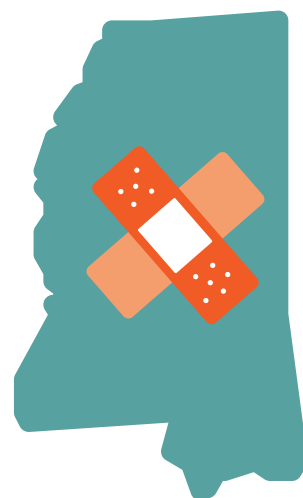
The National Association of School Nurses (NASN) recommends that the minimum ratio of nurse to students be 1:750.³² An MDE report showed that only 41% of school nurses in Mississippi reported working within this recommended ratio.

MDE also reported that Mississippi needs a total of 626 school nurses to reach the minimum recommended ratio.

The current nurse to student ratio in Mississippi improved from the 2015 ratio of 1:1,112.



There were **13** Mississippi school districts without any school nurse in 2019.



Appendix A: Measures used for county rankings

Premature death	Access to exercise opportunities	Preventable hospital stays	Children in single-parent homes
Poor or fair health	Excessive drinking	Diabetic monitoring	Social associations
Poor physical health days	Alcohol-impaired driving deaths	Mammography screening	Violent crime
Poor mental health days	Sexually transmitted infections	Flu vaccinations	Injury deaths
Low birthweight	Teen births	High school graduation	Air pollution—particulate matter
Adult smoking	Uninsured	Some college	Drinking water violations
Adult obesity	Primary care physicians	Unemployment	Severe housing problems
Food environment index	Dentists	Children in poverty	Driving alone to work
Physical inactivity	Mental health providers	Income inequality	Long commute-driving alone

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