MISSISSIPPI TITLE V MCH NEW NATIONAL OUTCOME MEASURES

Office of Health Data and Research
Office of Health Services
Mississippi State Department of Health

Updated January 2025

Health Services Office of Health Data and Research
National Outcome Measures (NOMs)

1. Short Title: Severe Maternal Morbidity

Full Title: Rate of severe maternal morbidity per 10, 000 delivery hospitalizations

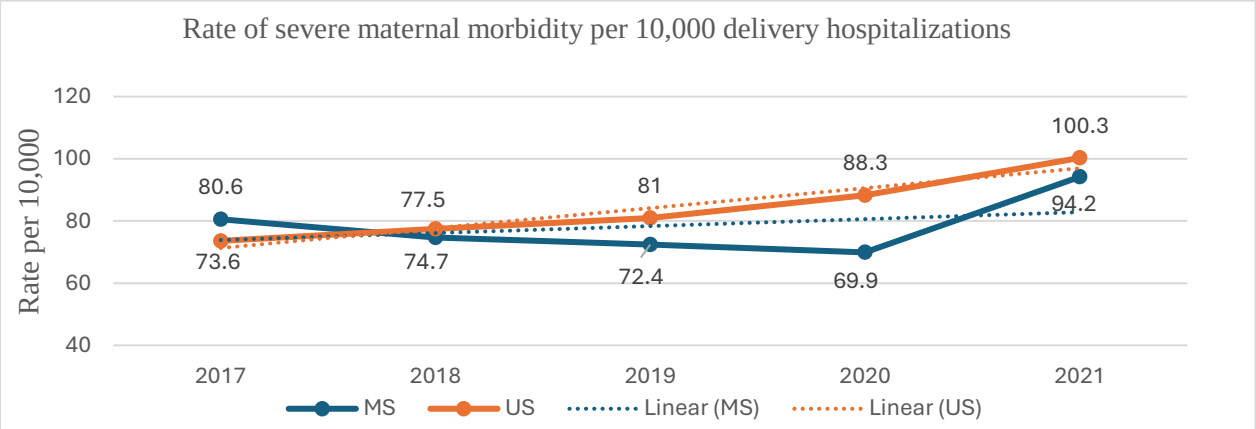
The Severe Maternal Morbidity (SMM) rate in MS decreased from 80.6 in 2017 to 69.9 in 2020, indicating an improvement. However, the rate increased to 94.2 in 2021. The rate of SMM for the US increased from 73.6 in 2017 to 100.3 in 2021 which indicates an upward trend over the five years. The details are outlined in Table 1 and Figure 1 below.

Table 1: Rate of severe maternal morbidity per 10,000 delivery hospitalizations (Severe Maternal Morbidity)

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022**
MS	80.6 (71.3- 89.9)	74.7 (65.7- 83.8)	72.4 (63.5- 81.4)	69.9 (61.0- 78.8)	94.2 (83.8- 104.6)	…
US	73.6 (72.7- 74.5)	77.5 (76.5- 78.4)	81.0 (80.1- 82)	88.3 (87.3- 89.3)	100.3 (99.3- 101.4)	---

Based on 95% CI, the decrease in MS from 2017 to 2020 is not statistically significant. However, from 2020 to 2021 the increase is statistically significant. When compared to the US, MS rate for 2017 is higher than the US but is not statistically significant. From 2018 to 2021, the rate for MS is lower than for US but only 2020 is statistically significant.

Figure 1: Rate of severe maternal morbidity per 10,000 delivery hospitalizations (Severe Maternal Morbidity)



Data Source: Healthcare Cost and Utilization Project- State Inpatient Databases

Note: Data not available for 2022

2. Short Title: Maternal Mortality

Full Title: Maternal mortality rate per 100, 000 live births

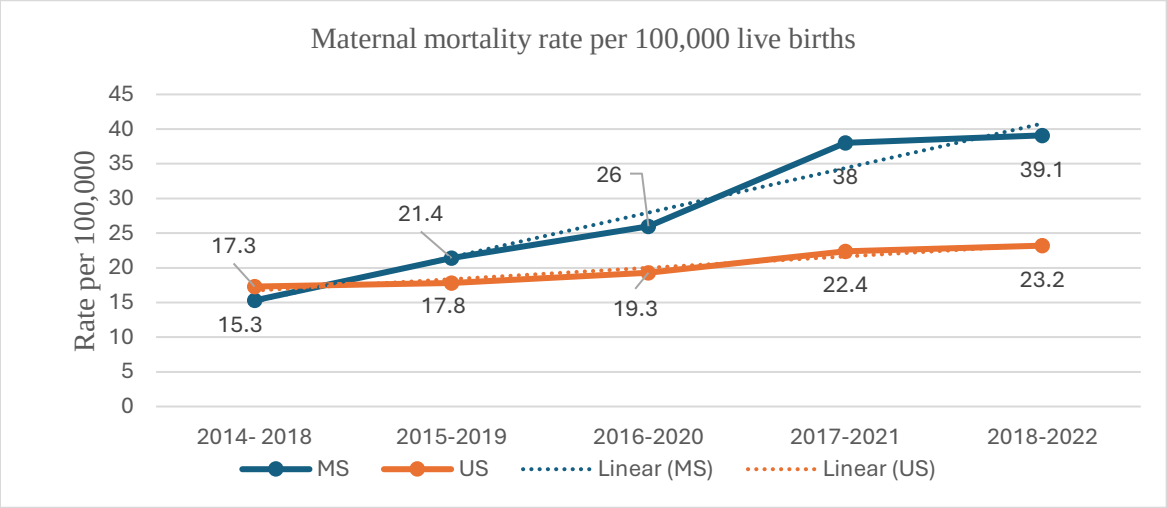
The Maternal Mortality (MM) rate in MS shows an increase in the trend from 15.3 to 39.1 (per 100,000 live births) over the years indicating a significant increase in maternal deaths. In comparison with the US, we can also see an increase in trend from 17.3 to 23.2 (per 100,000 live births) at a slower rate. The details of the estimates are in Table 2 and Figure 2 below.

Table 2: Maternal mortality rate per 100,000 live births (Maternal Mortality)

	2014_2018 (95% CI)	**2015_2019 (95% CI)**	**2016_2020 (95% CI)**	**2017_2021 (95% CI)**	**2018_2022 (95% CI)**
MS	15.3 (10.3- 22.0)	21.4 (15.3- 29.1)	26.0 (19.2- 34.5)	38.0 (29.6- 48.1)	39.1 (30.5 – 49.4)
US	17.3 (16.7- 17.9)	17.8 (17.2- 18.4)	19.3 (18.7- 19.9)	22.4 (21.7- 23.1)	23.2 (22.5 -23.9)

Based on 95% CI the increase in MS from one year to the next subsequently is not statistically significant. However, when compare 2014_2018 to 2018_2022, the increase is statistically significant. When we compare MS to the US, based on the 95% CI, MS rate is lower than that for the US in 2014_2018 but it is not statically significant. As for, 2015_2019 and 2016_2020, MS rates are higher than the US but are not statistically significant. But for the year 2017_2021 and 2018_2022 the rates in MS are statistically significantly higher than US.

Figure 2: Maternal mortality rate per 100,000 live births (Maternal Mortality)



Data Source: National Vital Statistics System

3. Short Title: Teen Births

Full Title: Teen Birth rate, ages 15 through 19, per 1000 females

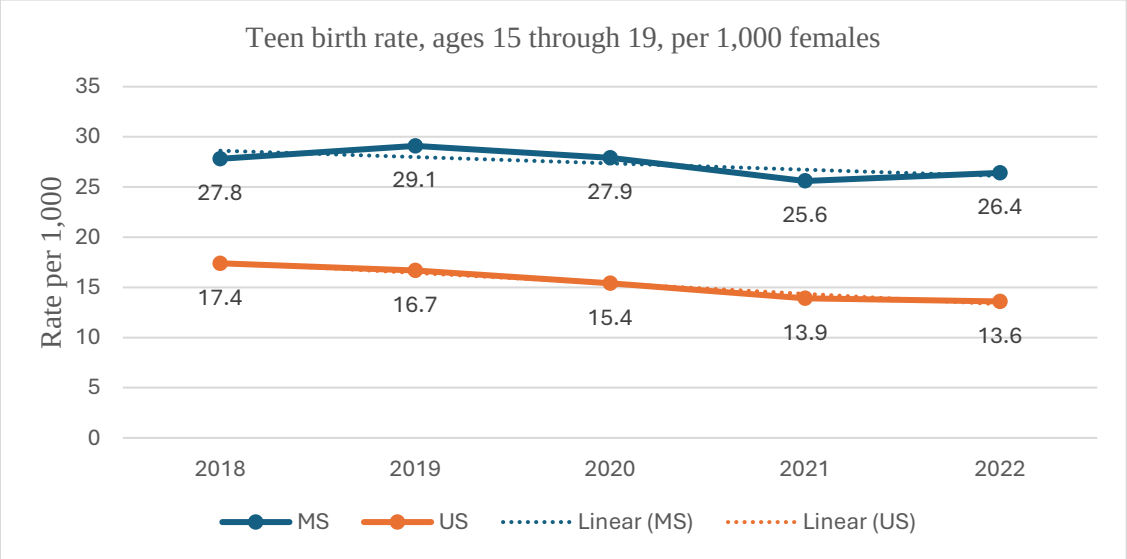
The Teen Birth (TB) rate in MS decreased from 27.8 in 2018 to 26.4 in 2022 (per 1,000 females), fluctuating over the years. The teen birth rate in the US has been decreasing over the years, from 17.4 in 2018 to 13.6 in 2022. There is a declining trend in both the US and MS, which suggests some progress (Table 3 and Figure 3).

Table 3: Teen birth rate, ages 15 through 19, per 1,000 females

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	27.8 (26.8- 28.9)	29.1 (28- 30.2)	27.9 (26.8- 28.9)	25.6 (24.6- 26.6)	26.4 (25.4- 27.4)
US	17.4 (17.3- 17.5)	16.7 (16.6- 16.7)	15.4 (15.3- 15.5)	13.9 (13.9- 14)	13.6 (13.6- 13.7)

Based on 95% CI, we observed a statistically significant drop in the rate from 2020 to 2021 in MS. However, there is no statistically significant difference in other years. In Comparison, Mississippi is statistically significantly higher than the US in all the years.

Figure 3: Teen birth rate, ages 15 through 19, per 1,000 females



Data Source: National Vital Statistics System

4. Short Title: Low Birth Weight

Full Title: Percent of Low-birth-weight deliveries (<2500 grams)

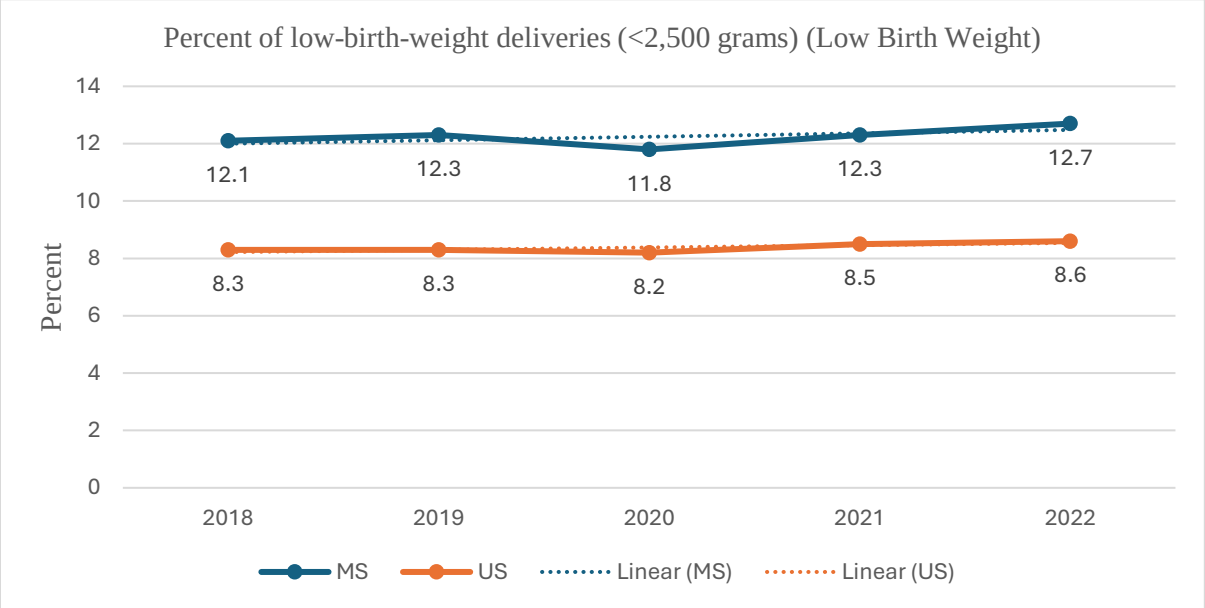
The percentage of Low Birth Weight (LBW) deliveries in MS shows a slight increase from 12.1% in 2018 to 12.7% in 2022. In the US the percentage is relatively the same during 2018 and 2019 (8.3%) with a slight decrease in 2020 (8.2%) and an increase in 2021 to 2022 from 8.5% to 8.6%. The details are shown in Table 4 and Figure 4 below.

Table 4: Percent of low-birth-weight deliveries (<2,500 grams) (Low Birth Weight)

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	12.1 (11.8- 12.5)	12.3 (12- 12.7)	11.8 (11.5- 12.2)	12.3 (12.0- 12.7)	12.7 (12.4- 13.1)
US	8.3 (8.3- 8.3)	8.3 (8.3- 8.3)	8.2 (8.2- 8.3)	8.5 (8.5- 8.5)	8.6 (8.6- 8.6)

Based on 95% CI, the increased rates in MS from 2018 to 2022 is not statistically significant. When compared to the US, the MS rate is significantly higher than that for the US for each year.

Figure 4: Percent of low-birth-weight deliveries (<2,500 grams) (Low Birth Weight)



Data Source: National Vital Statistics System

5. Short Title: Preterm Birth

Full Title: Percent of preterm birth (<37 weeks gestation)

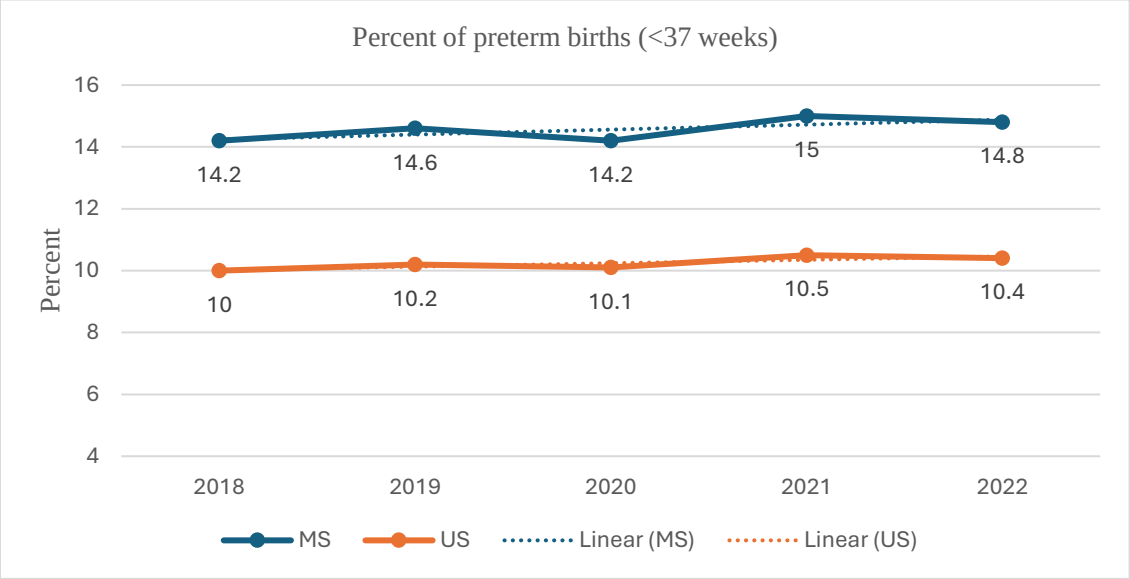
The percentage of preterm birth (PTB) in MS fluctuated slightly over the years starting at 14.2% in 2018 and increasing to 14.8% in 2022. For the US the percentages show similar fluctuations starting at 10% in 2018 and increasing slightly to 10.4% in 2022. (Table 5 and Figure 5)

Table 5: Percent of preterm births (<37 weeks) (Preterm Birth)

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	14.2 (13.9- 14.6)	14.6 (14.2- 14.9)	14.2 (13.8- 14.6)	15.0 (14.6- 15.3)	14.8 (14.4- 15.2)
US	10.0 (10- 10.1)	10.2 (10.2- 10.3)	10.1 (10.1- 10.1)	10.5 (10.5- 10.5)	10.4 (10.4- 10.4)

Based on 95% CI, although there is a significant increase from 2020 to 2021 in MS, the overall increase in the rate for MS from 2018 to 2022 is not statistically significant. Compared to the US, the rate in MS is statistically significantly higher than the rate in the US for each year.

Figure 5: Percent of preterm births (<37 weeks) (Preterm Birth)



Data Source: National Vital Statistics System

6. Short Title: Still Birth

Full Title: Stillbirth rate per 1,000 live births plus fetal deaths

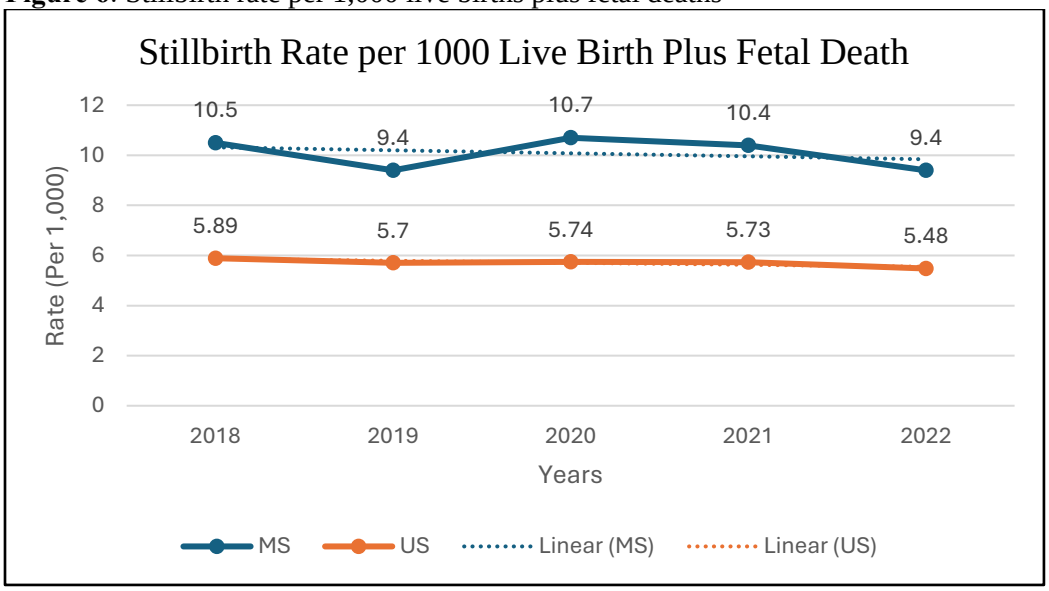
The stillbirth rate per 1,000 live births plus fetal deaths in MS has fluctuated, decreasing from 10.5 (per 1,000) in 2018 to 9.4 (per 1,000) in 2022. The rate in the US has decreased from 5.89 (per 1,000) in 2019 to 5.48 (per 1,000) in 2022. The details are in Table 6 and Figure 6 below.

Table 6: Stillbirth rate per 1,000 live births plus fetal deaths

	2018 (95%CI)	2019 (95%CI)	2020 (95%CI)	2021 (95% CI)	2022 (95% CI)
MS	10.5 (10.1-10.8)	9.4 (8.5-10)	10.7 (9.6-11.7)	10.4 (9.4-11.5)	9.4 (8.4-10.4)
US	5.89 (5.86-5.91)	5.70 (5.68-5.72)	5.74 (5.71-5.76)	5.73 (5.70-5.75)	5.48 (5.45-5.50)

SUID

Figure 6: Stillbirth rate per 1,000 live births plus fetal deaths



Data source: Centers for Disease Control and Prevention (CDC)

7. Short Title: Perinatal Mortality

Full Title: Perinatal mortality rate per 1,000 live births plus fetal deaths

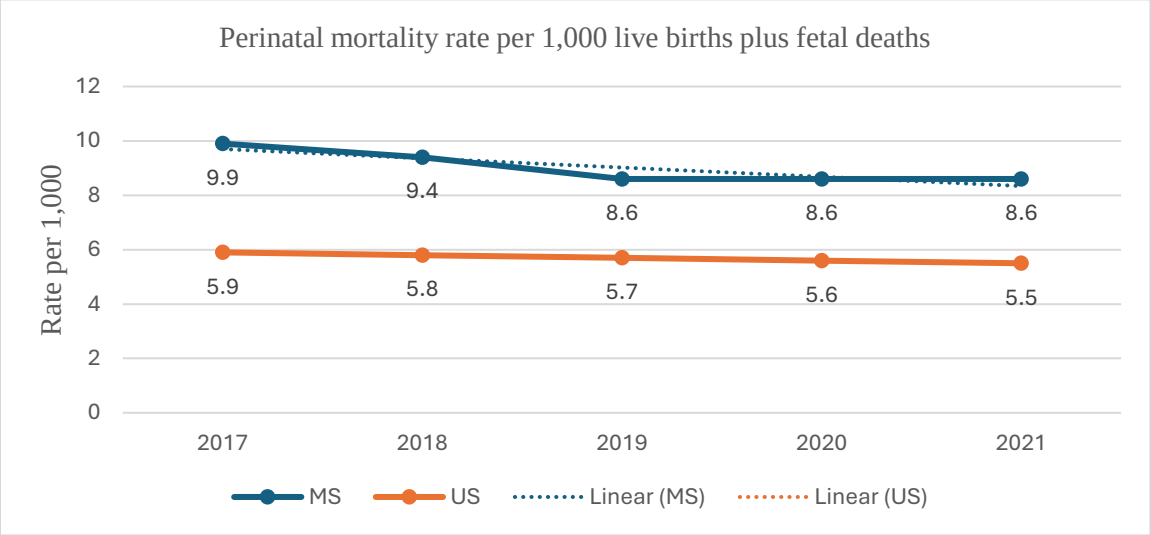
The Perinatal Mortality (PNM) rate in MS has decreased from 9.9 in 2017 to 8.6 in 2019 and has been consistently the same since then. The rate also declined from 5.9 in 2017 to 5.5 in 2021 for the US. We can observe that both the US and MS show a positive trend towards decreasing perinatal mortality rate but the rate in MS remained higher than that of the US over the years. (Table 7 and Figure 7).

Table 7: Perinatal mortality rate per 1,000 live births plus fetal deaths

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022**
MS	9.9 (8.9- 10.9)	9.4 (8.4- 10.4)	8.6 (7.6- 9.5)	8.6 (7.6- 9.6)	8.6 (7.6- 9.5)	…
US	5.9 (5.9- 6)	5.8 (5.8- 5.9)	5.7 (5.6- 5.8)	5.6 (5.6- 5.7)	5.5 (5.5- 5.6)	….

Based on 95% CI, the decrease in the rate for MS is not statistically significant from the year 2017 to 2021 sequentially. When compared to the US, MS rates are statistically significantly higher than the US each year.

Figure 7: Perinatal mortality rate per 1,000 live births plus fetal deaths



Data Source: National Vital Statistics System

Note: No data available for 2022

8. Short Title: Infant Mortality

Full Title: Infant mortality rate per 1,000 live births

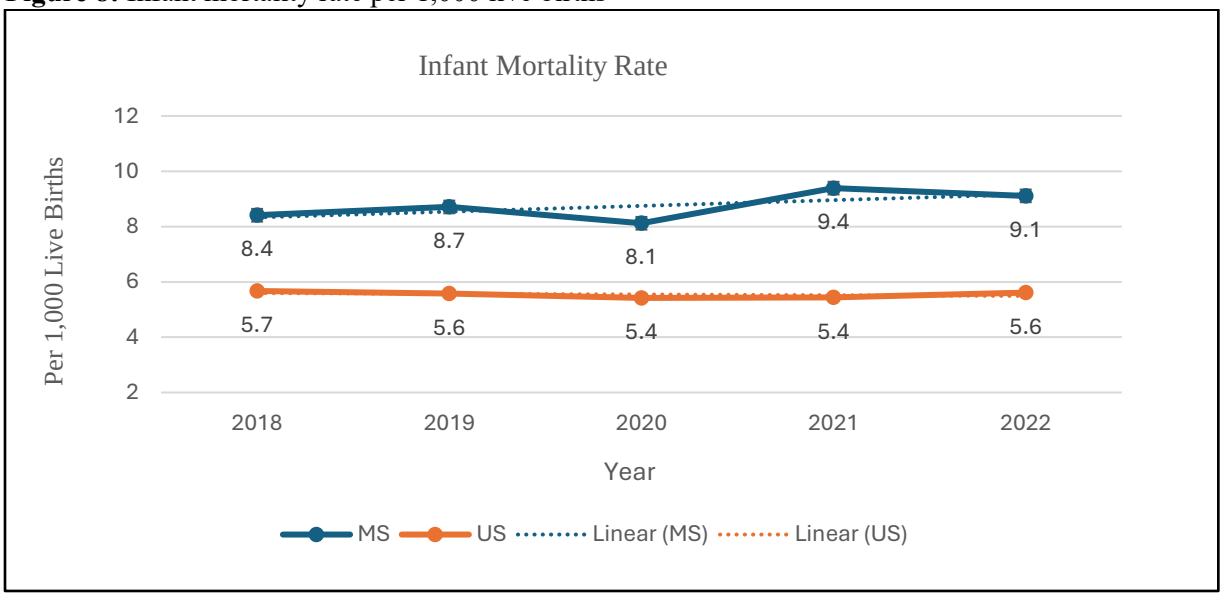
From 2018 to 2022, the Infant death rate (per 1,000 live births) in Mississippi increased from 8.4 (per 1,000 live births) in 2018 to 9.1 (per 1,000 live births) in 2022 with some fluctuations during the years. For the US, the rate slightly decreased during these years. The details are in Table 8 and Figure 8 below:

Table 8: Infant mortality rate per 1,000 live births

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	8.4 (7.5-9.3)	8.7 (7.7-9.7)	8.1 (7.2-9.1)	9.4 (8.4-10.0)	9.1 (8.1-10.1)
US	5.7 (5.6-5.7)	5.6 (5.5-5.7)	5.4 (5.3-5.5)	5.4 (5.4-5.5)	5.6 (5.5-5.7)

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant increase from 2018 to 2022 in Mississippi. Compared with the US overall, the Infant death rate of Mississippi is statistically significantly higher than the Infant death rate of the US for each of these years at 95% Confidence Interval level.

Figure 8: Infant mortality rate per 1,000 live births



Data source: Centers for Disease Control and Prevention (CDC) website.

9. Short Title: Neonatal Mortality

Full Title: Neonatal mortality rate per 1,000 live births

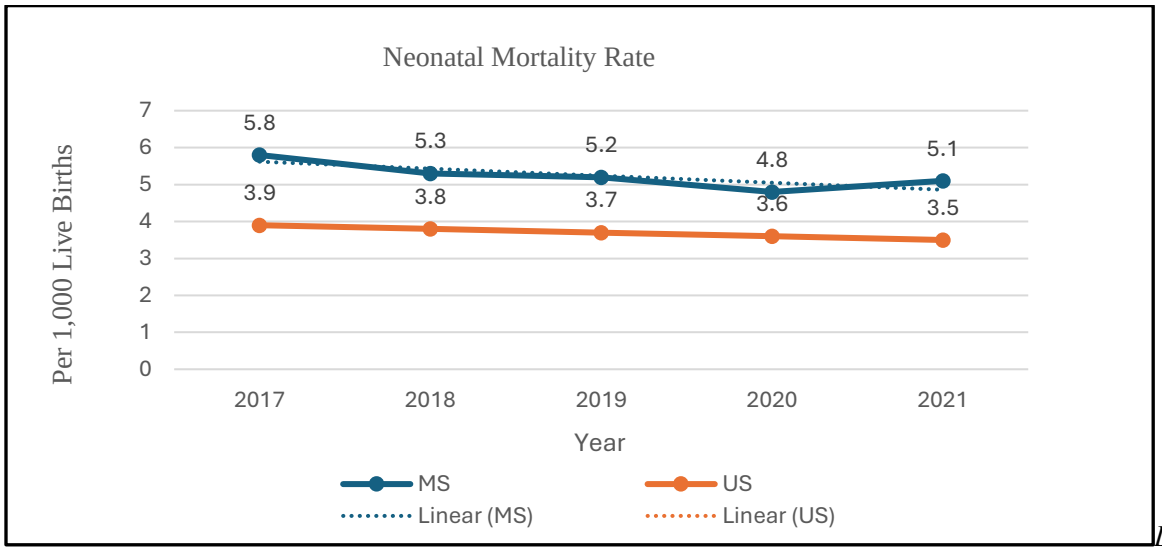
In Mississippi, the Neonatal Mortality Rate (per 1,000 live births) decreased from 5.8 (per 1,000 live births) in 2017 to 5.1 (per 1,000 live births) in 2021. In the US, the rate steadily decreased from 3.9 in 2017 to 3.5 in 2021. The details are in Table 9 and Figure 9 below:

Table 9: Neonatal mortality rate per 1,000 live births

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022**
MS	5.8 (5.0-6.5)	5.3 (4.5-6.0)	5.2 (4.4-5.9)	4.8 (4.1-5.6)	5.1 (4.3-5,8)	….
US	3.9 (3.8-3.9)	3.8 (3.7-3.8)	3.7 (3.6-3.8)	3.6 (3.5-3.6)	3.5 (3.4-3.6)	…..

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant decrease from 2017 to 2021 in Mississippi. Compared to the US, the rate for Mississippi is statistically significantly higher than the rate of the US overall for each of these years at 95% Confidence Interval level.

Figure 9: Neonatal mortality rate per 1,000 live births



Data Source: National Vital Statistics System. Centers for Disease Control and Prevention (CDC) website

Note: 2022 data is not available for both MS and the US.

10. Short Title: Post neonatal Mortality

Full Title: Post neonatal mortality rate per 1,000 live births

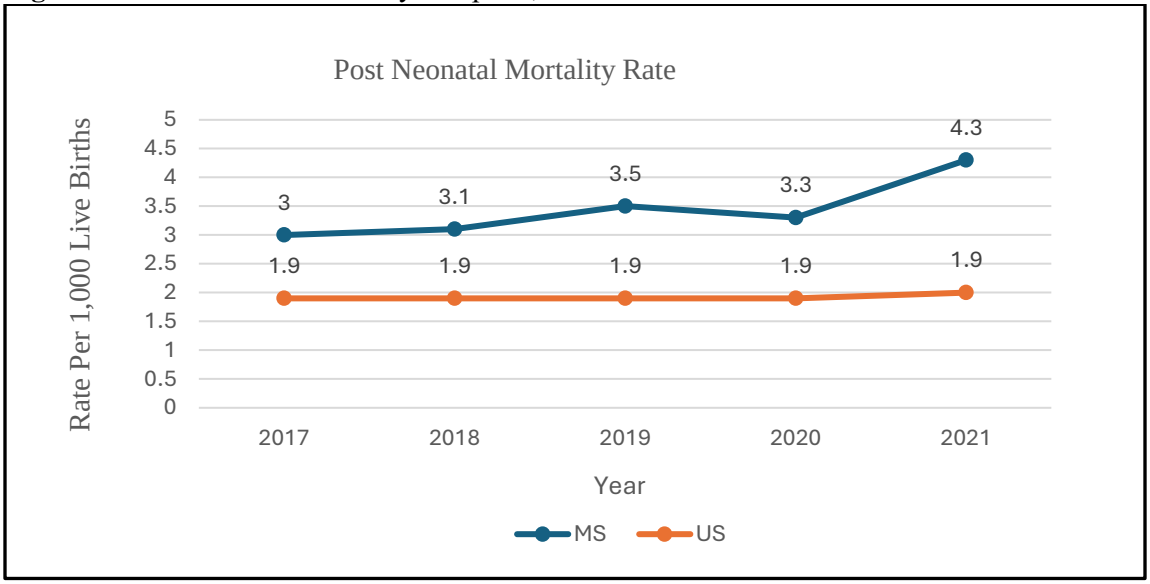
The Post neonatal death rate (per 1,000 live births) for Mississippi increased from 3 (per 1,000 births live birth) in 2017 to 4.3 (per 1,000 live births) in 2021. For the US, the rates remained the same from 2017 to 2021 and increased slightly in 2022. The rates in MS have been consistently higher than that of the US from 2017 to 2021. The details are in Table 10 and Figure 10 below:

Table 10: Post neonatal mortality rate per 1,000 live births

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	3.0 (2.4-3.5)	3.1 (2.6-3.7)	3.5 (2.9-4.2)	3.3 (2.7-3.9)	4.3 (3.6-5.0)	-----
US	1.9 (1.9-2.0)	1.9 (1.8-1.9)	1.9 (1.8-1.9)	1.9 (1.8-1.9)	1.9 (1.9-2.0)	2.0 (2.0-2.07)

Based on a 95% Confidence Interval (CI), There is a statistically significant increase from 2017 to 2021 in Mississippi. Compared to the US, the rate in Mississippi is statistically significantly higher than the rate in the US for each of these years 2017-2021 at a 95% Confidence Interval level.

Figure 10: Post neonatal mortality rate per 1,000 live births



Data Source: National Vital Statistics System. Centers for Disease Control and Prevention (CDC) website.

Note: 2022 data not available for MS.

11. Short Title: Preterm-Related Mortality

Full Title: Preterm-related mortality rate per 100,000 live births

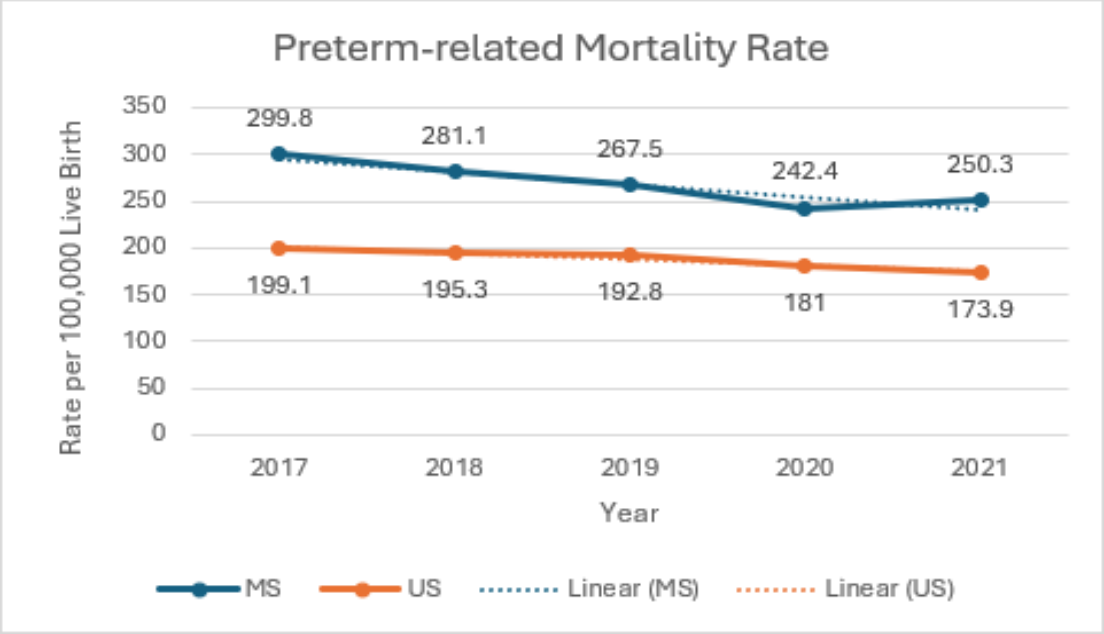
From 2017 to 2020, the preterm-related mortality rate (per 100,000 live births) in Mississippi decreased from 299.8 (per 100,000 live births) in 2017 to 242.4 in 2020 and slightly increased to 250.3 (per 100,000 live births) in 2021. The US also decreased from 199.1 in 2017 to 173.9 in 2021. The details are in Table 11 and Figure 11 below:

Table 11: Preterm-related mortality rate per 100,000 live births

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**
MS	299.8 (244.2-355.4)	281.1 (227-335.2)	267.5 (217.1-326.1)	242.4 (193.9-299.5)	250.3 (200.7-308.5)
US	199.1 (194.6-203.5)	195.3 (190.9-199.8)	192.8 (188.3-197.2)	181.0 (176.6-185.4)	173.9 (169.6–178.2)

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant decrease from 2017 to 2021 in Mississippi. Compared with the US national overall (2017-2021), the rate in Mississippi is statistically significantly higher than the rate in the US for each of these years at 95% Confidence Interval level.

Figure 11: Preterm-related mortality rate per 100,000 live births



Data Source: National Vital Statistics System (NVSS)

12. Short Title: SUID mortality

Full Title: Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

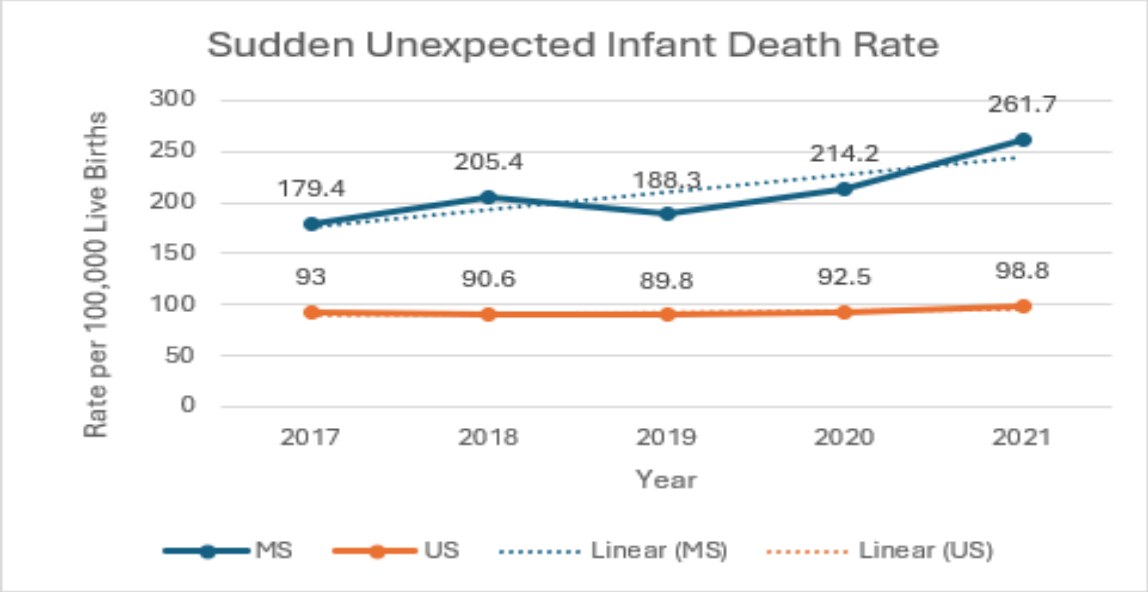
The Sudden Unexpected Infant Death (SUID) Rate (per 100,000 live births) in Mississippi increased from 179.4 (per 100,000 live births) in 2017 to 205.4 in 2018 and then decreased to 188.3 in 2019 and increased again to 261.7 (per 100,000 live births) in 2021. The US decreased from 93.0 in 2017 to 92.5 in 2020 with some fluctuations during these years then increased to 98.8 in 2021. The details are in Table 12 and Figure 12 below.

Table 12: Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**
MS	179.4 (139.0-227.8)	205.4 (161.8-257.2)	188.3 (146.5-238.4)	214.2 (168.8-268.2)	261.7 (208.3-315.1)
US	93.0 (89.9-96.0)	90.6 (87.6-93.7)	89.8 (86.7-92.8)	92.5 (89.3-95.6)	98.8 (95.5-102.0)

Based on a 95% Confidence Interval (CI), in Mississippi, we cannot conclude that there is a statistically significant increase from 2017 to 2021. Compared with the US overall, the rate in Mississippi is statistically significantly higher than the rate in the US for each of these years (2017-2021) at the 95% Confidence Interval level.

Figure 12: Sudden Unexpected Infant Death (SUID) rate per 100,000 live births



Data source: National Vital Statistics System (NVSS)

Note: There is no 2022 data available for MS and the US.

13. Short Title: Neonatal Abstinence Syndrome

Full Title: Rate of neonatal abstinence syndrome per 1,000 birth hospitalization

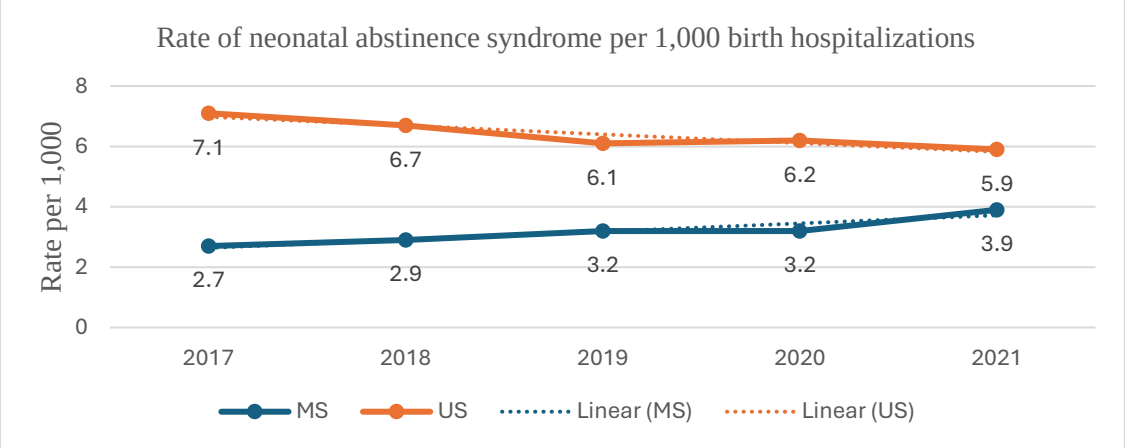
The rate of Neonatal Abstinence Syndrome (NAS) in MS shows a gradual increase over the years from 2.7 (per 1,000 births hospitalizations) in 2017 to 3.9 in 2021. The rate remained the same for the years 2019 and 2020 with 3.2. Whereas the rate of neonatal abstinence syndrome in the US decreased from 7.1 (per 1,000 births hospitalizations) in 2017 to 5.9 in 2021, indicating a downward trend. The NAS rates in MS have been lower than those of the NAS rates in the US throughout the years. Although the rates of MS remain below the US rate, we can observe that there is an increase in the trend over the years for MS. (Table 13 and Figure 13)

Table 13: Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022**
MS	2.7 (2.2- 3.3)	2.9 (2.4- 3.5)	3.2 (2.6- 3.8)	3.2 (2.6- 3.8)	3.9 (3.3- 4.6)	….
US	7.1 (7.1- 7.2)	6.7 (6.6- 6.8)	6.1 (6.1- 6.2)	6.2 (6.1- 6.2)	5.9 (5.8- 5.9)	….

Based on 95% CI, the rate increase in MS from 2017 to 2021 is statistically significant. However, when comparing each year subsequently, it is not statistically significant. When compared to the US rates, the rate in MS is statistically significantly lower than the US for each of these years.

Figure 13: Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations



Data Source: Healthcare Cost and Utilization Project- State Inpatient Databases

Note: No data available for 2022

14. Short Title: School Readiness

Full Title: Percent of children meeting the criteria developed for school readiness

The Percentage of children, ages 3 through 5, meeting the criteria developed for school readiness in MS is lower than the percentage in the US overall in 2022-2023. (Table 14)
Based on a 95% confidence interval (CI), we cannot conclude that the percentage in MS is statistically significantly lower than the percentage in the US in 2022-2023.

Table 14: Percent of children, ages 3 through 5, meeting the criteria developed for school readiness

	2022-2023 (95% CI)
MS	61.7 (53.3-69.6)
US	64.6 (63.2-66.0)

Data source: Data Resource Center for Child & Adolescent Health

Note: Data not available for 2019 to 2021

15. Short Title: Tooth decay/Cavities

Full Title: Percent of children ages 1 through 17, who have decayed teeth or cavities in the past year

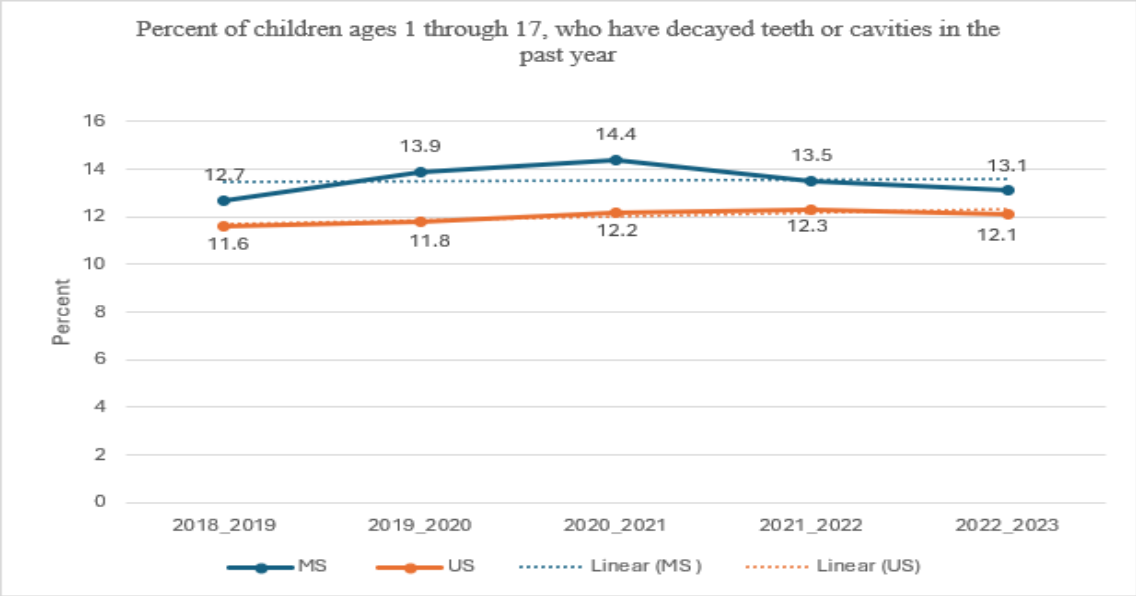
The percentage of children, ages 1 through 17, who have decayed teeth or cavities in Mississippi fluctuated from 2018-2019 to 2022-2023. In the US, the rates slightly increased from 11.6 in 2018-2019 to 12.1 in 2022 – 2023. The details are in Table 15 and Figure 15 below:

Table 15: Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

	2018-2019 (95% CI)	**2019-2020 (95% CI)**	**2020-2021 (95% CI)**	**2021-2022 (95% CI)**	**2022 – 2023 (95% CI)**
MS	12.7 (10.2-15.7)	13.9 (11.6-16.5)	14.4 (12.2-16.9)	13.5 (11.1-16.2)	13.1 (10.7 – 15.9)
US	11.6 (11.1-12.2)	11.8 (11.2-12.4)	12.2 (11.7-12.8)	12.3 (11.8-12.7)	12.1 (11.7 – 12.5)

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant difference from 2018-2019 to 2022-2023. Compared to the US, the rate in Mississippi is higher than the rate in the US for each of these years, however, we cannot conclude that there is a statistically significant higher rates at a 95% Confidence Interval level.

Figure 15: Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year



Data source: National Survey of Children's Health (NSCH)

16. Short Title: Child Mortality

Full Title: Child mortality rate, ages 1 through 9, per 100,000

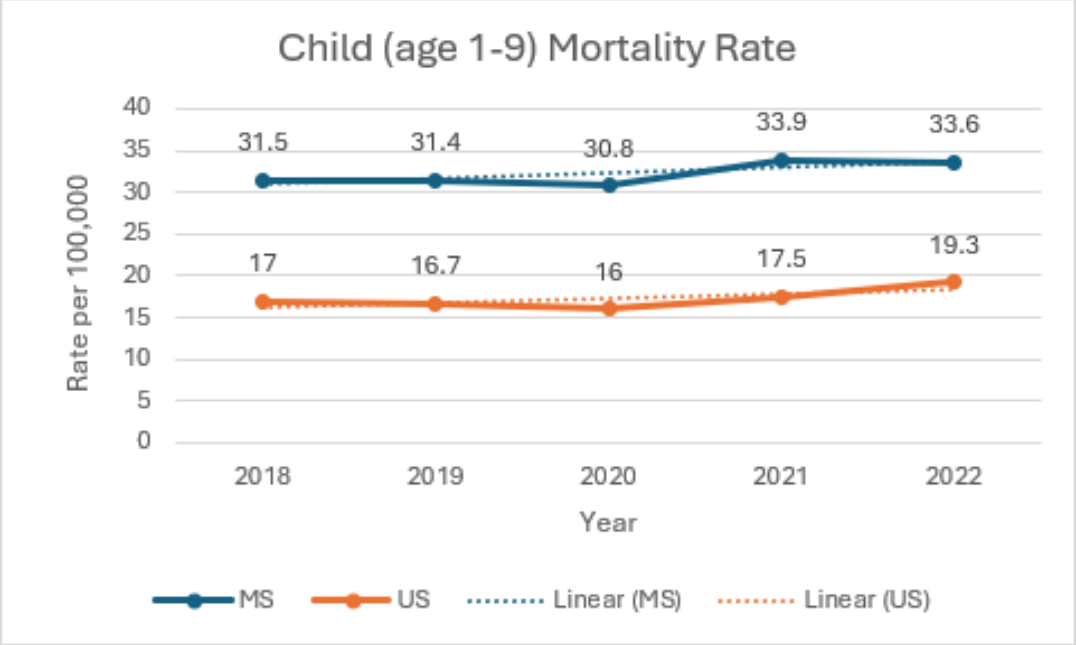
From 2018 to 2021, children aged 1 through 9 mortality rate (per 100,000) in Mississippi increased from 31.5 (per 100,000) in 2018 to 33.6 (per 100,000) in 2022. For the US, the rate slightly increased from 17.0 in 2018 to 19.3 in 2022 with some fluctuations in between. The details are in Table 16 and Figure 16 below.

Table 16: Child Mortality rate, ages 1 through 9, per 100,000

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**	**2022 (95% CI)**
MS	31.5 (25.6-37.6)	31.4 (25.4-37.4)	30.8 (24.9-36.8)	33.9 (27.6-40.2)	33.6 (27.3-40.0)
US	17.0 (16.6-17.5)	16.7 (16.3-17.1)	16.0 (15.6-16.4)	17.5 (17.1-17.9)	19.3 (18.8-19.7)

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant increase from 2018 to 2022 in Mississippi. Compared with the US, the Child (age 1-9) mortality rate of Mississippi is statistically significantly higher than the Child (1-9) mortality rate of the US overall for each of these years at 95% Confidence Interval level.

Figure 16: Child Mortality rate, ages 1 through 9, per 100,000



Data source: National Vital Statistics System (NVSS)

17. Short Title: Adolescent Mortality

Full Title: Adolescent mortality rate, ages 10 through 19, per 100,000

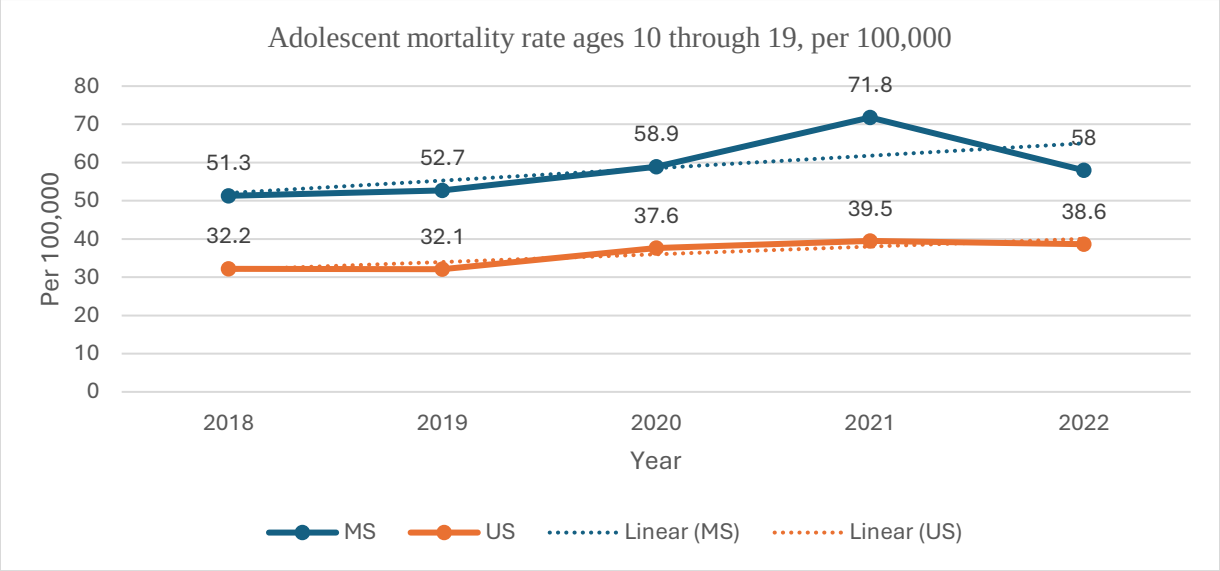
The adolescent mortality rate in MS increased from 51.3 (per 100,000 population) in 2018 to 71.8 in 2021. Thereafter, it slightly declined to 58 in 2022. The national rate remained relatively stable from 2018 to 2019, at around 32.2 and 32.1, and jumped in 2021 to 39.5. In 2022, the rate slightly decreased to 38.6. (Table 17 and Figure 17)

Table 17: Adolescent mortality rate ages 10 through 19, per 100,000

	2018 (95% C.I)	**2019 (95% C.I)**	**2020 (95% C.I)**	**2021 (95% C.I)**	**2022 (95% C.I)**
MS	51.3 (44.4-58.3)	52.7 (45.7-59.8)	58.9 (51.4-66.3)	71.8 (63.6-80.0)	58.0 (50.5-65.4)
US	32.2 (31.6-32.7)	32.1 (31.5-32.6)	37.6 (37-38.2)	39.5 (38.9-40.1)	38.6 (38-39.2)

Based on 95% CI, the increase in adolescent mortality in MS from 2018 to 2022 is not statistically significant. When compared to the US rates Mississippi consistently had a statistically significantly higher adolescent mortality rate across all five years.

Figure 17: Adolescent mortality rate ages 10 through 19, per 100,000



Data source: National Vital Statistics System (NVSS)

18. Short Title: Adolescent Motor Vehicle Death

Full Title: Adolescent Motor Vehicle mortality rate, ages 15 through 19, per 100,000

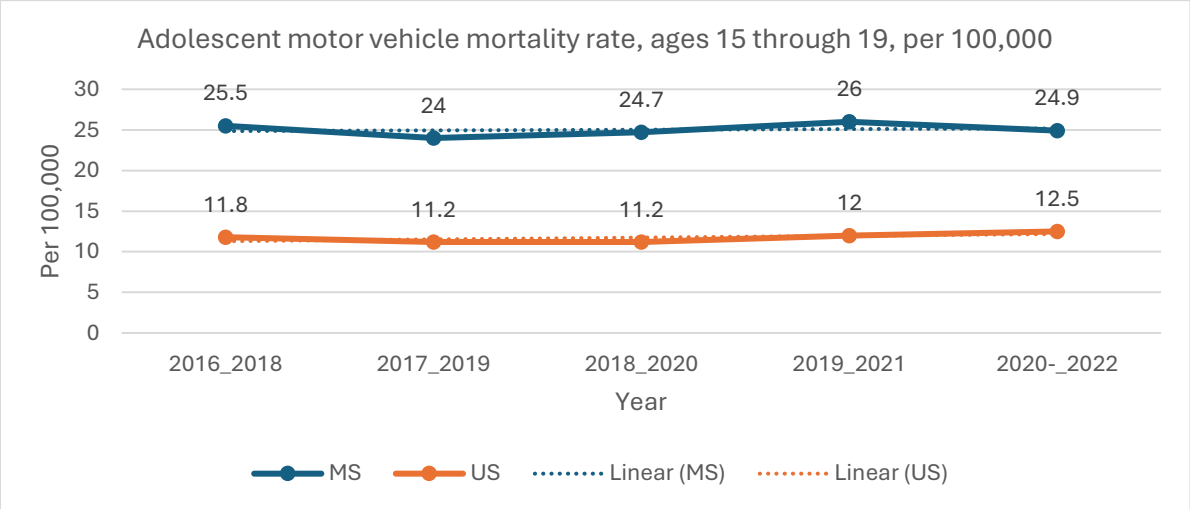
The rates in Mississippi are much higher, beginning in 2016 -2018 at 25.5 (per 100,000), falling to 24 in 2017 -2019, and then gradually rising to 26 by 2019-2021 and a small dip to 24.9 in 2020_2022. Whereas the U.S. had a constant rate of 11.8 with little increase to 12 in 2020-2022 and 12.5 in 2020_2022. (Table 18 and Figure 18)

Table 18: Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

	2016_2018 (95% C.I)	**2017_2019 (95% C.I)**	**2018_2020 (95% C.I)**	**2019_2021 (95% C.I)**	**2020_2022 (95% C.I)**
MS	25.5 (21.5-29.4)	24.0 (20.1-27.8)	24.7 (20.8-28.7)	26.0 (21.9-30.1)	24.9 (21.0-28.9)
US	11.8 (11.6-12.1)	11.2 (10.9-11.4)	11.2 (10.9-11.5)	12.0 (11.7-12.3)	12.5 (12.3-12.8)

Based on 95% CI, we cannot conclude that there has been a statistically significant decrease in the adolescent motor vehicle mortality rate in MS over the years. The data indicates that Mississippi consistently had a statistically significant higher rate of Adolescent motor vehicle deaths than the US nationally.

Figure 18: Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000



Data source: National Vital Statistics System (NVSS)

19. Short Title: Adolescent Suicide

Full Title: Adolescent suicide rate, ages 10 through 19, per 100,000

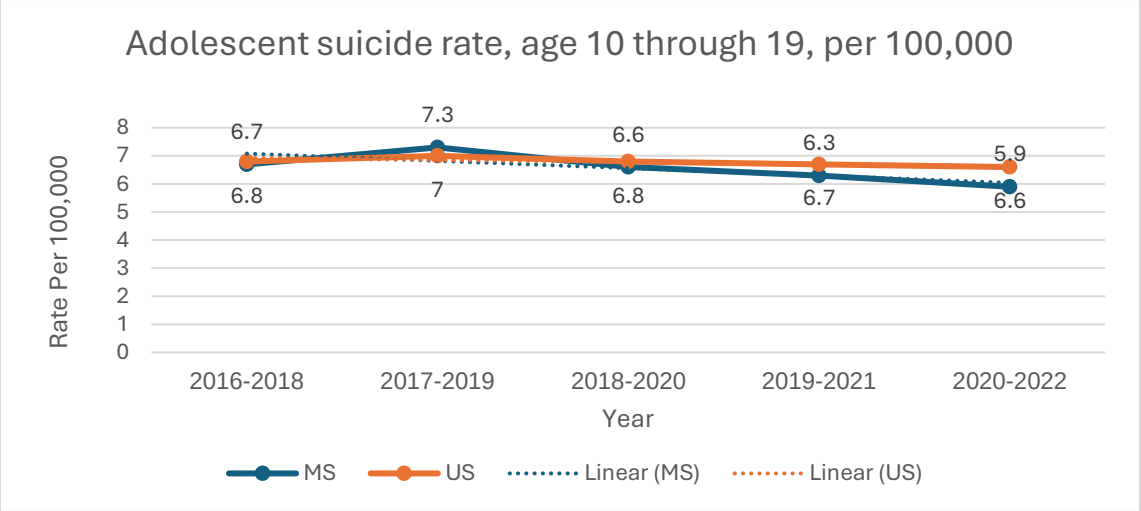
Adolescent suicide rate, ages 10 through 19 (per 100,000) in MS increased from 6.7 (per 100,000) in 2016-2018 to 7.3 (per 100,000) in 2017-2019, and then gradually decreased to 5.9 in 2020-2021. The rate in the US decreased from 6.8 (per 100,000) in 2016-2018 to 6.6 (per 100,000) in 2020-2022 (Table 19 and Figure 19 below.

Table 19: Adolescent suicide rate, ages 10 through 19, per 100,000

	2016-2018 (95% CI)	**2017-2019 (95% CI)**	**2018-2020 (95% CI)**	**2019-2021 (95% CI)**	**2020-2022 (95% CI)**
MS	6.7 (5.3-8.3)	7.3 (5.9-9.0)	6.6 (5.3-8.2)	6.3 (5.0-7.9)	5.9 (4.6-7.5)
US	6.8 (6.7-7.0)	7.0 (6.8-7.1)	6.8 (6.7-6.9)	6.7 (6.6-6.8)	6.6 (6.5-6.7)

Based on a 95% confidence interval (CI), we cannot conclude that the rate from 2016-2018 to 2020-2022 in MS is statistically significantly different. When compared to the US, the rate in 2017-2019 in MS is higher than the rate in the US but it's not statistically significant. For the rest of the years, the rate in MS is lower than US and they are not statistically significant.

Figure 19: Adolescent suicide rate, ages 10 through 19, per 100,000



Data source: National Vital Statistics System (NVSS).

20. Short Title: Adolescent Firearm Death

Full Title: Adolescent firearm mortality rate, ages 10 through 19, per 100,000

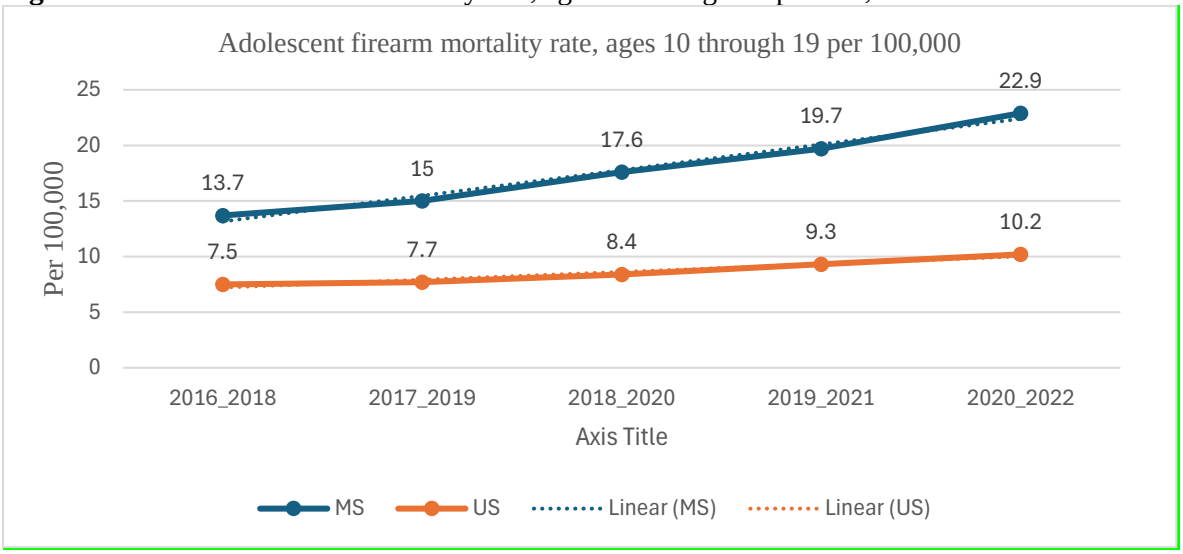
Mississippi experienced a significant and steady increase in the adolescent firearm mortality rate, rising from 13.7 (per 100,000) in 2016-2018 to 22.9 (per 100,000) in 2020-2022. Nationally, the United States also saw a gradual rise, though at a lower rate than Mississippi, from 7.5 (per 100,000) in 2016-2018 to 10.2 (per 100,000) in 2020-2022. Both Mississippi and the national rates show upward trends in adolescent firearm deaths over the five years, with Mississippi consistently having more than double the national rates. (Table 20 and Figure 20)

Table 20: Adolescent firearm mortality rate, ages 10 through 19 per 100,000

	2016_2018 (95% C.I)	**2017_2019 (95% C.I)**	**2018_2020 (95% C.I)**	**2019_2021 (95% C.I)**	**2020_2022 (95% C.I)**
MS	13.7 (9.89-17.50)	15.1 (11.02-18.98)	17.6 (13.12 -22.07)	19.7 (15.42 – 23.97)	22.9 (18.15 – 27.64)
US	7.5 (7.18 – 7.81)	7.7 (7.37-8.02)	8.4 (8.11-8.68)	9.3 (9.01- 9.58)	10.2 (9.92-10.4)

Based on 95% CI, we cannot conclude that there is a statistically significant difference in the increase from year to year in MS. However, there is a statistically significant increase in adolescent firearm mortality in Mississippi when compared to the US annually.

Figure 20: Adolescent firearm mortality rate, ages 10 through 19 per 100,000



Data Source: National Vital Statistics (NVSS)

21. Short Title: Child Injury Hospitalization

Full Title: Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

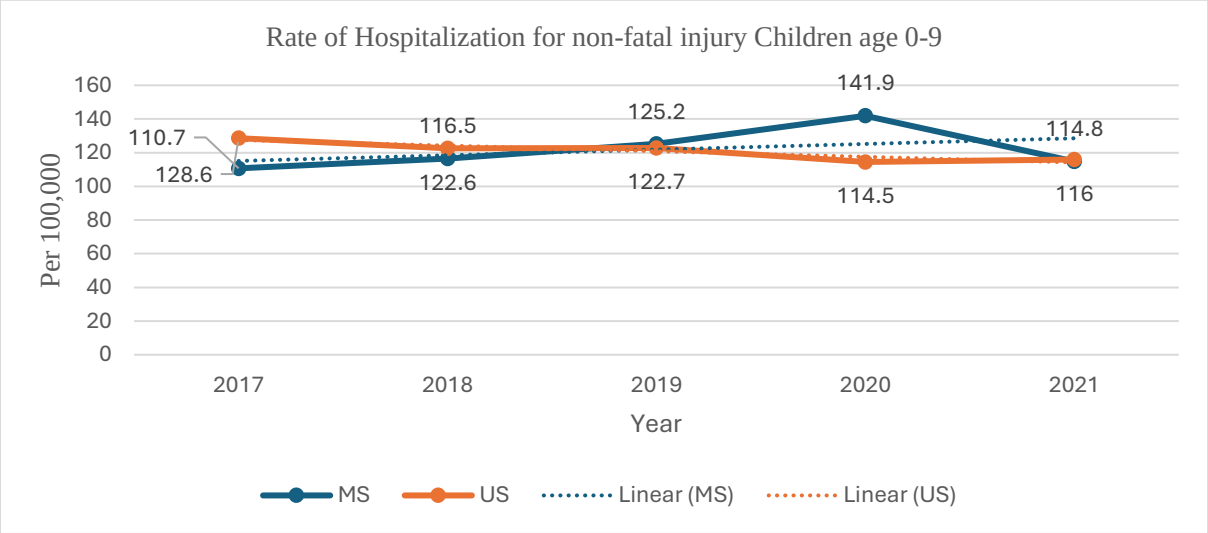
The rate of hospitalization for non-fatal injury (per 100,000) children, ages 0 through 9 in MS increased from 110.7 (per 100,000) in 2017 to 141.9 in 2020 and then decreased to 114.8 in 2021. The rate in the US decreased from 128.6 in 2017 to 116.0 in 2021. (Table 21 and Figure 21).

Table 21: Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9

	2017 (95% CI)	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (95% CI)**
MS	110.7 (100.1-121.2)	116.5 (105.7-127.4)	125.2 (113.9-136.6)	141.9 (129.7-154.0)	114.8 (103.8-125.8)
US	128.6 (127.4-129.7)	122.6 (121.5-123.7)	122.7 (121.6-123.8)	114.5 (113.4-115.5)	116 (114.9-117.1)

Based on a 95% confidence interval (CI), we can conclude that the increase from 110.7 (per 100,000) in 2017 to 141.9 (per 100,000) in 2020 in MS is statistically significant. However, the overall increase in MS from 110.7 in 2017 to 114.8 in 2021 is not statistically significant. When compared to the US, the rate in MS is statistically significantly lower than the rate in the US in 2017, and statistically significantly higher than the rate in the US in 2020. There are no statistically significant differences in the rates between the MS and the US in 2018, 2019, and 2021.

Figure 21: Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9



Data source: Healthcare Cost and Utilization Project (HCUP)

22. Short Title: Adolescent Injury Hospitalization

Full Title: Rate of hospitalization for non-fatal injury per 100,000 children, ages 10 - 19

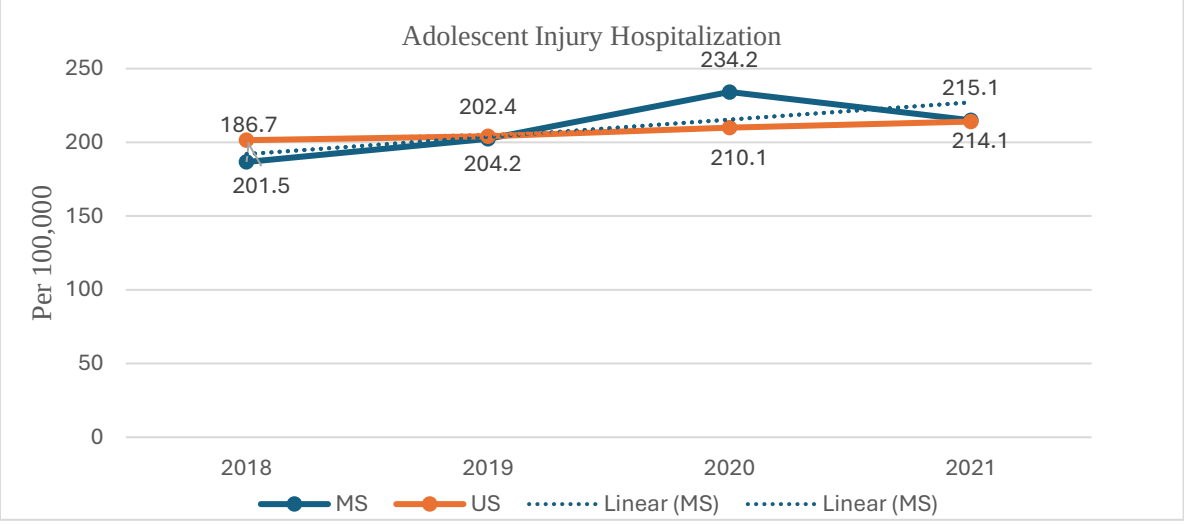
Mississippi's hospitalization rates for adolescent non-fatal injuries increased significantly from 186.7 (per 100,000 adolescents) in 2018 to 234.2 in 2020, before dropping slightly to 215.1 in 2021. However, Mississippi's rates remained lower than the national average in 2018 and 2019 but surpassed the national rates in 2020 and 2021. The national rates show a steady but gradual increase over the same period, rising from 201.5 in 2018 to 214.1 in 2021. (Table 22 and Figure 22)

Table 22: Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 - 19

	2018 (95% C.I)	**2019 (95% C.I)**	**2020 (95% C.I)**	**2021 (95% C.I)**
MS	186.7 (173.6-199.9)	202.4 (188.6-216.2)	234.2 (219.2-249.1)	215.1 (200.9-229.3)
US	201.5 (200.1-202.8)	204.2 (202.8-205.6)	210.1 (208.7-211.5)	214.1 (212.7-215.5)

Based on 95% CI, the increased rate in MS from 186.7 in 2018 to 234.2 in 2020 is statistically significant. However, the decrease rate from 234.2 in 2020 to 215.1 in 2021 is not statistically significant. In 2018, the US rate was statistically significantly higher than Mississippi's.
By 2020, Mississippi's rate surpassed the national rate, showing a statistically significant difference. In 2019 and 2021, the differences between Mississippi and US rates were not statistically significant.

Figure 22: Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 through 19



Data Source: Healthcare Cost & Utilization Project – State Inpatient Diseases (HCUP-SID)

23. Short Title: Women's Health Status

Full Title: Percent of women, ages 18 through 44, in excellent or very good health

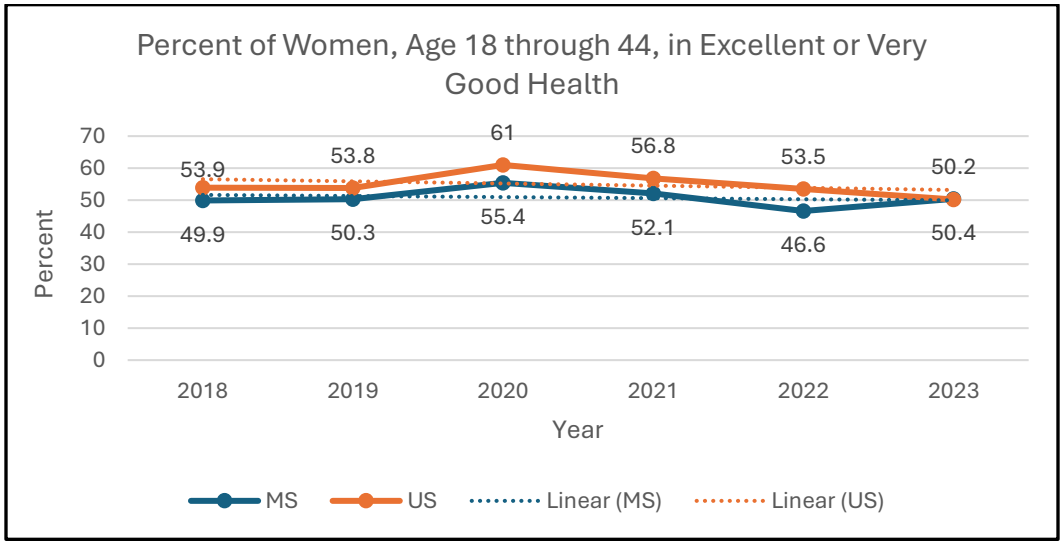
From 2018 to 2023, the percentage of women aged 18 to 44 in Mississippi (MS) reporting excellent or very good health varied. It started at 49.9% in 2018, peaked at 55.4% in 2020, fell to 46.6% by 2022, and then increased to 50.4% by 2023. In comparison, the rates in the United States (US) started at 53.9% in 2018, reaching 61% in 2020, and dropping to 50.2% in 2023. Overall, women in MS consistently reported lower health status compared to those in the US during 2018-2022, but about the same percentage as the US in 2023. (Table 23 and Figure 23)

Table 23: Percent of women, ages 18 through 44, in excellent or very good health

	2018 (95% CI)	2019 (95% CI)	2020 (95% CI)	2021 (95% CI)	2022 (95% CI)	2023 (95% CI)
MS	49.9 (46.0-53.9)	50.3 (46.2-54.3)	55.4 (51.8-59)	52.1 (47.6-56.6)	46.6 (42.3-50.8)	50.4 (46.1-54.7)
US	53.9 (53.2-54.7)	53.8 (53.0-54.5)	61 (60.2-61.8)	56.8 (56.0-57.6)	53.5 (52.8-54.2)	50.2 (49.4-50.9)

Based on 95% C.I., we cannot conclude that the differences in percentages of women, age 18 through 44, in excellent or very good health in all the years are statistically significantly different. When compared with the US, the percentages are statistically significantly lower than the percentage in US in 2020 and 2022. But we cannot conclude that there are statistically significant differences in 2018, 2019, 2021, and 2023.

Figure 23: Percent of women, ages 18 through 44, in excellent or very good health



Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

24. Short Title: Children's Health Status

Full Title: Percent of children, ages 0 through 17, in excellent or very good health

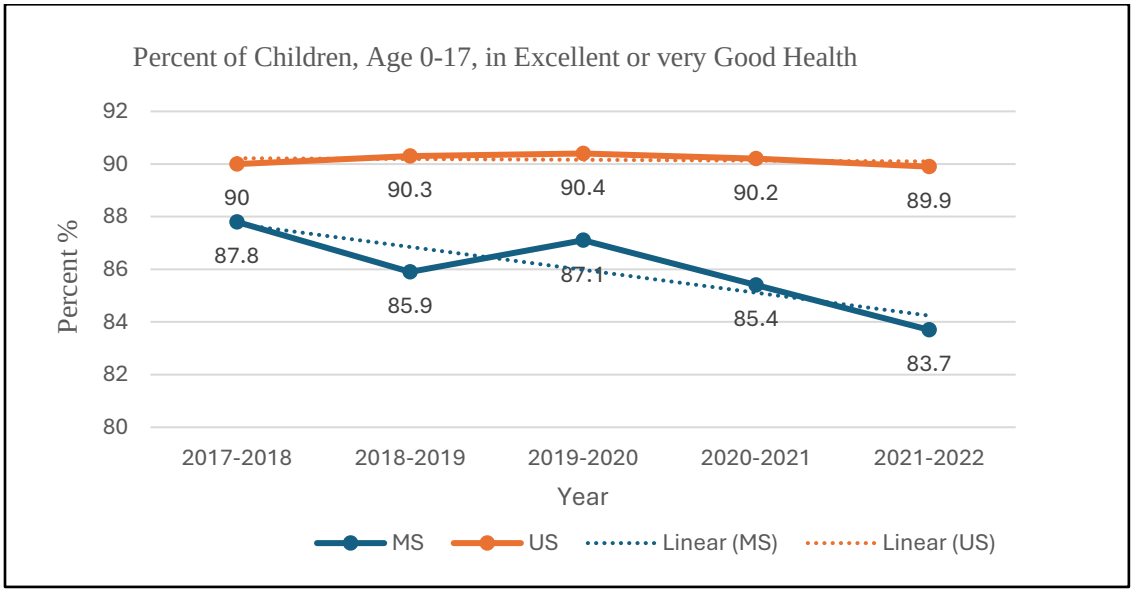
From 2017-2018 to 2021-2022, the percentage of children in Mississippi, aged 0 through 17 in excellent or very good health decreased from 87.8 percent in 2017-2018 to 83.7 percent in 2021-2022. The US percent remains relatively the same. The details are in Table 24 and Figure 24 below:

Table 24: Percent of children, ages 0 through 17, in excellent or very good health

	2017-2018 (95% CI)	**2018-2019 (95% CI)**	**2019-2020 (95% CI)**	**2020-2021 (95% CI)**	**2021-2022 (95% CI)**
MS	87.8 (84.8-90.2)	85.9 (82.8-88.5)	87.1 (84.5-89.3)	85.4 (82.7-87.8)	83.7 (80.7-86.3)
US	90.0 (89.3-90.7)	90.3 (89.7-90.8)	90.4 (89.9-91.0)	90.2 (89.7-90.7)	89.9 (89.4-90.4)

However, based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant decrease from 2017-2018 to 2021-2022 in Mississippi. In comparison, the percentage in Mississippi is statistically significantly lower than the US overall for the years 2018-2019, 2019-2020, 2020-2021, and 2021-2022. We cannot conclude that the percentage of children, ages 0 through 17, in excellent or very good health in Mississippi in 2017-2018 is statistically significantly lower than the percentage in the US overall at 95% Confidence level.

Figure 24: Percent of children, ages 0 through 17, in excellent or very good health



Data source: National Survey of Children's Health (NSCH)

25. Short Title: Child Obesity

Full Title: Percent of children, ages 2 through 4, and adolescents, ages 6 through 17, who are obese (BMI at or above the 95th percentile)

Obesity (Ages 2-4)

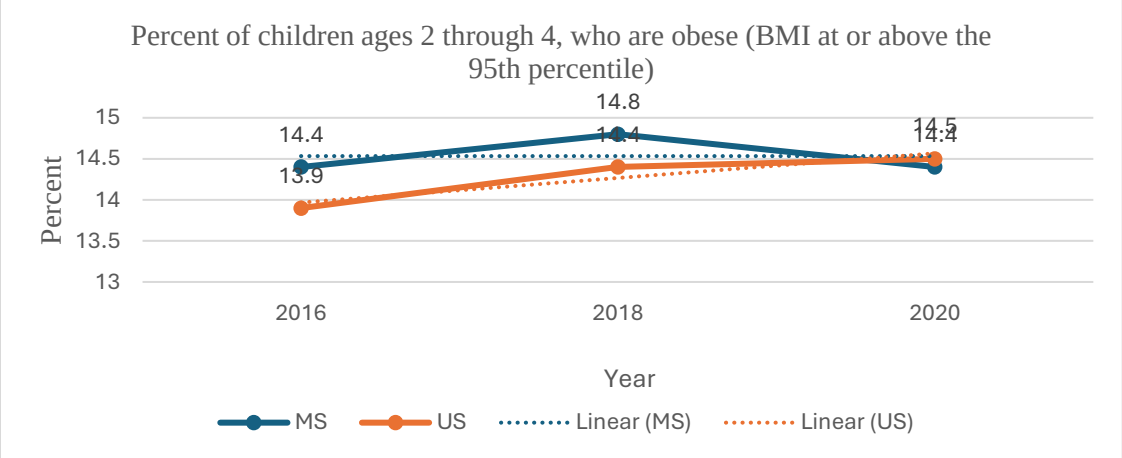
From 2016 to 2020, the percentage of children, ages 2 through 4, who are obese (BMI at or above the 95th percentile) in Mississippi increased from 14.4% in 2016 to 14.8% in 2018 and then decreased to 14.4% in 2020. In the US, the percentage increased from 13.9% in 2016 to 14.5% in 2020. The details are in Table 25.1 and Figure 25.1 below:

Table 25.1: Percent of children, ages 2 through 4, who are obese (BMI at or above the 95th percentile)

	2016 (95% CI)	**2017 (95% CI)**	**2018 (95% CI)**	**2019 (95% CI)**	**2020 (95% CI)**
MS	14.4 (14.0-14.8)	……..	14.8 (14.4-15.2)	…….	14.4 (13.9-14.9)
US	13.9 (13.9-14.0)	……	14.4 (14.3-14.4)	……...	14.5 (14.4-14.5)

Based on 95% CI, we cannot conclude that there is a statistically significant difference in the percentage of children, ages 2 through 4, who are obese (BMI at or above the 95th percentile) in Mississippi. Compared to the US, MS had a statistically significantly higher percentage than the US in 2016 and 2018. However, there is no statistically significant difference between the US and MS in 2020.

Figure 25.1: Percent of children ages 2 through 4, who are obese (BMI at or above the 95th percentile)



Data Source: WIC

Note: Date not available for 2017, 2019 and 2022

Obesity (Ages 6 – 17)

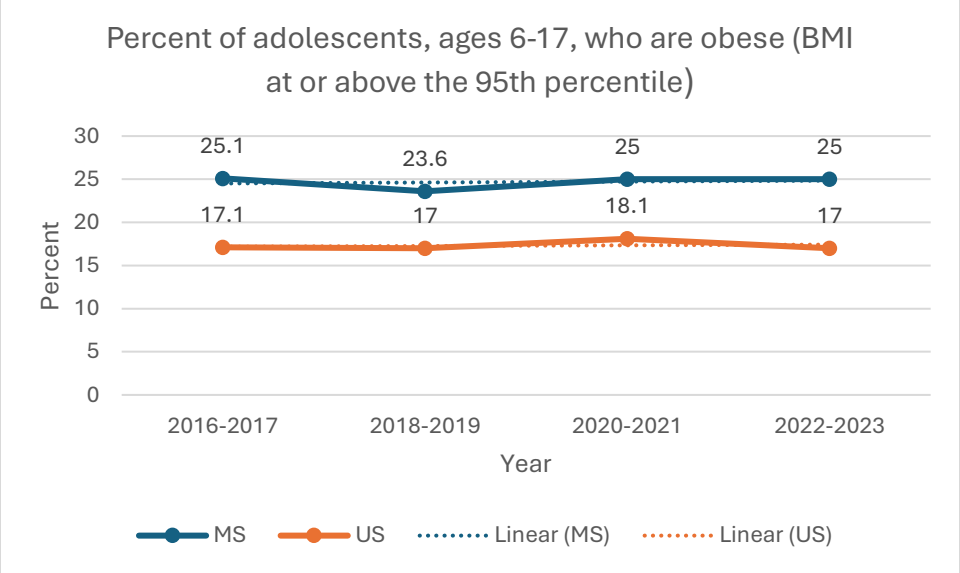
From 2016-2017 to 2022-2023, the percentage of adolescents, ages 6 through 17, who are obese (BMI at or above the 95th percentile) in Mississippi is fluctuated with a slide decrease from 25.1% in 2016-2017 to 25.0% in 2022-2023. In the US, the percentage is also fluctuated with a slide decrease from 17.1% in 2016-2017 to 17.0% in 2022-2023. The details are in Table 25.2 and Figure 25.2 below:

Table 25.2: Percent of adolescents, ages 6 through 17, who are obese (BMI at or above the 95th percentile)

	2016-2017 (95% CI)	**2017-2018 (95% CI)**	**2018-2019 (95% CI)**	**2019-2020 (95% CI)**	**2020-2021 (95% CI)**	**2022-2023 (95% CI)**
MS	25.1 (20.7-29.9)	---------	23.6 (20-27.6)	---------	25.0 (21.6-28.8)	25.0 (21.2-29.2)
US	17.1 (16.2-18.1)	---------	17.0 (16.2-17.9)	---------	18.1 (17.4-18.8)	17.0 (16.4-17.6)

Based on a 95% Confidence Interval (CI), we cannot conclude that there is a statistically significant decrease in Mississippi from 2016-2017 to 2022-2023. In comparison, the percentage in Mississippi is statistically significantly higher than the percentage in the US overall for each of these years at 95% Confidence Interval level.

Figure 25.2: Percent of adolescents, ages 6 through 17, who are obese (BMI at or above the 95th percentile)



Data Source: National Survey of Children's Health (NSCH)

Note: Data for 2017-2018 and 2019-2020 are not available

26. Short Title: Postpartum Depression

Full Title: Percent of women who experience postpartum depressive symptoms

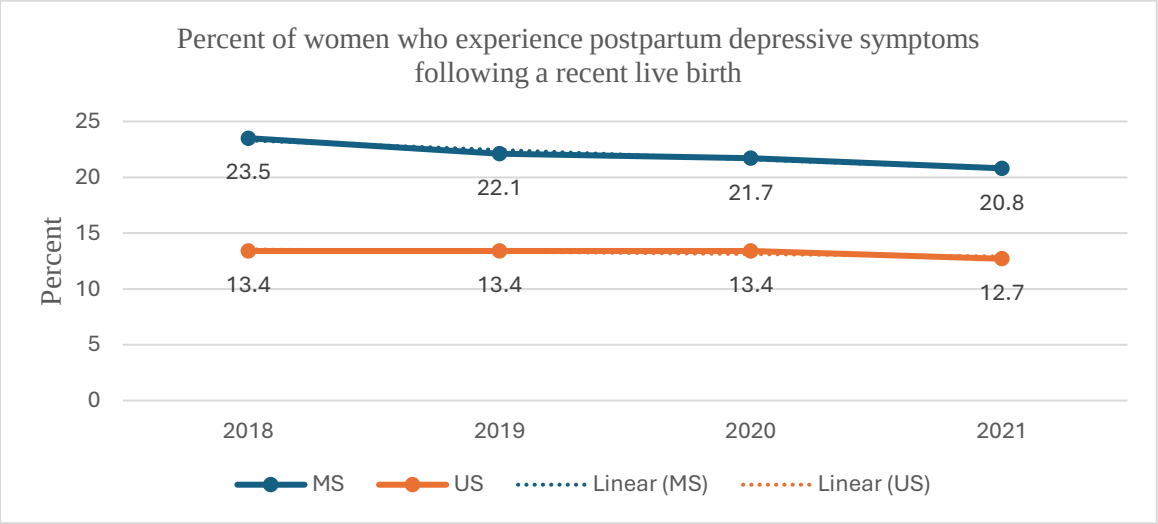
The percentage of women who experience postpartum depressive symptoms following a recent live birth (PPD) in MS decreased from 23.5% in 2018 to 20.8% in 2021. The percentage for the US has been stable from 2018 to 2020 at 13.4% with a slight decrease to 12.7% in 2021. Mississippi has a consistently higher percentage of PPD when compared to the US even though there has been a decrease in trend over the years. (Table 26 and Figure 26)

Table 26: Percent of women who experience postpartum depressive symptoms following a recent live birth

	2018 (95% CI)	**2019 (95% CI)**	**2020 (95% CI)**	**2021 (% CI)**	**2022 (95% CI)**
MS	23.5 (20.6- 26.7)	22.1 (19.4- 25.0)	21.7 (18.6- 25.2)	20.8 (17.6- 24.4)	……..
US	13.4 (12.9- 13.9)	13.4 (12.9- 14)	13.4 (12.9- 14)	12.7 (12.2- 13.3)	12.6 (12- 13.2)

Based on 95% CI, we cannot conclude that there is a statistically significant decrease in the percentage of women who experience postpartum depressive symptoms in MS from 2018 to 2021. In comparison MS rate is statistically significantly higher than the US in all the years.

Figure 26: Percent of women who experience postpartum depressive symptoms following a recent live birth



Data Source: Pregnancy Risk Assessment Monitoring System

No data available for MS during 2022

27: Short Title: Behavioral/Conduct Disorders

Full Title: Percent of children, ages 6 through 11, who have behavioral or conduct disorder

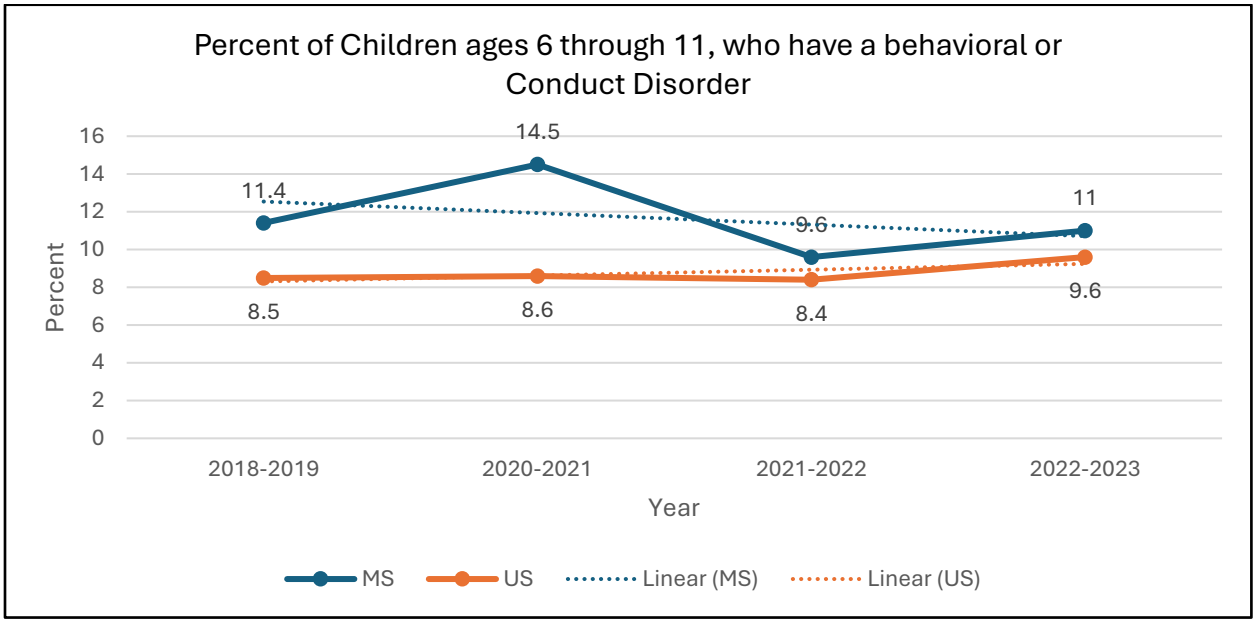
The percentages of children ages 6 through 11 who have a behavioral or conduct disorder in MS have fluctuated with slide decrease during these years. Meanwhile, the percentage in the US increased from 8.5% in 2018-2019 to 9.6% in 2022-2023. Compared with the US, the percentages in MS are higher than the percentages in the US overall in all these years. (Table 27 and Figure 27)

Table 27: Percent of children ages 6 through 11, who have a behavioral or conduct disorder

	2018-2019 (95%CI)	2019-2020 (95%CI)	2020-2021 (95%CI)	2021-2022 (95% CI)	2022-2023 (95% CI)
MS	11.4 (7.9-16.1)	---------	14.5 (10.6-19.6)	9.6 (6.9-13.2)	11.0 (7.8-15.2)
US	8.5 (7.8-9.3)	---------	8.6 (8.0-9.3)	8.4 (7.8-9.0)	9.6 (8.9-10.2)

Based on a 95% confidence interval (CI), we cannot conclude that the percentages of children ages 6 through 11, who have a behavioral or conduct disorder in MS are statistically significantly different during these years. When compared with the percentage in the US, the percentage of MS in 2020-2021 is statistically significantly higher than the percentages in the US. However, we cannot conclude that the rates in other years are statistically significantly higher than the rates in the US.

Figure 27: Percent of children ages 6 through 11, who have a behavioral or conduct disorder



Data source: Data Resource Center for Child & Adolescent Health

Note: Data for 2019-2020 are not available.

28: Short Title: Adolescent Depression/Anxiety

Full Title: Percent of adolescents, ages 12 through 17, who have depression or anxiety

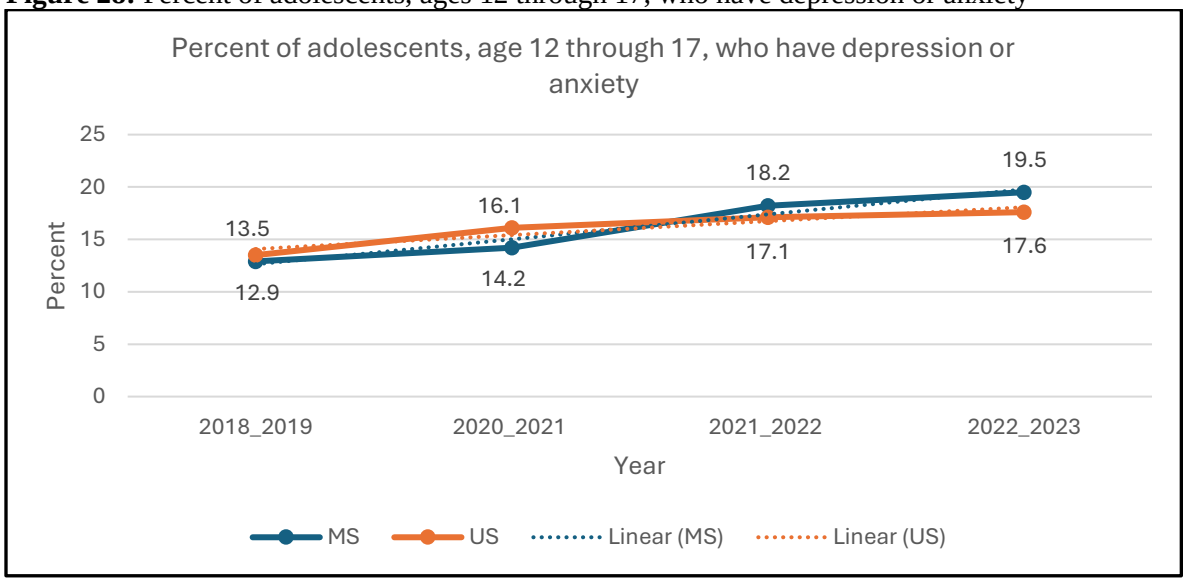
In Mississippi, the percentage of adolescents with depression or anxiety increased from 12.9% in 2018-2019 to 19.5% in 2022-2023. Nationally, the percentage of adolescents with depression or anxiety steadily increased each year, rising from 13.5% in 2018-2019 to 17.6% in 2022-2023. (Table 28 and Figure 28)

Table 28: Percent of adolescents, ages 12 through 17, who have depression or anxiety

	2018_2019 (95% C.I)	**2019_2020 (95% C.I)**	**2020_2021 (95% C.I)**	**2021_2022 (95% C.I)**	**2022_2023 (95% C.I)**
MS	12.9 (9.1-18.0)	------	14.2 (11.1-18.0)	18.2 (14.2-23.1)	19.5 (15.3-24.6)
US	13.5 (12.7 -14.3)	------	16.1 (15.3-17.0)	17.1 (16.3-17.8)	17.6 (16.9-18.3)

Based on 95% C.I., the percentages in Mississippi from 2018_2019 to 2022_2023 are not statistically significantly different during the period. Compared with the US, the differences between the depression/anxiety rates in Mississippi and the US are not statistically significant for these periods.

Figure 28: Percent of adolescents, ages 12 through 17, who have depression or anxiety



Data Source: National Survey of Children's Health (NSCH)

Note: Data for 2019-2020 are not available.

29: Short Title: CSHCN Systems of Care

Full Title: Percent of children, with special healthcare needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

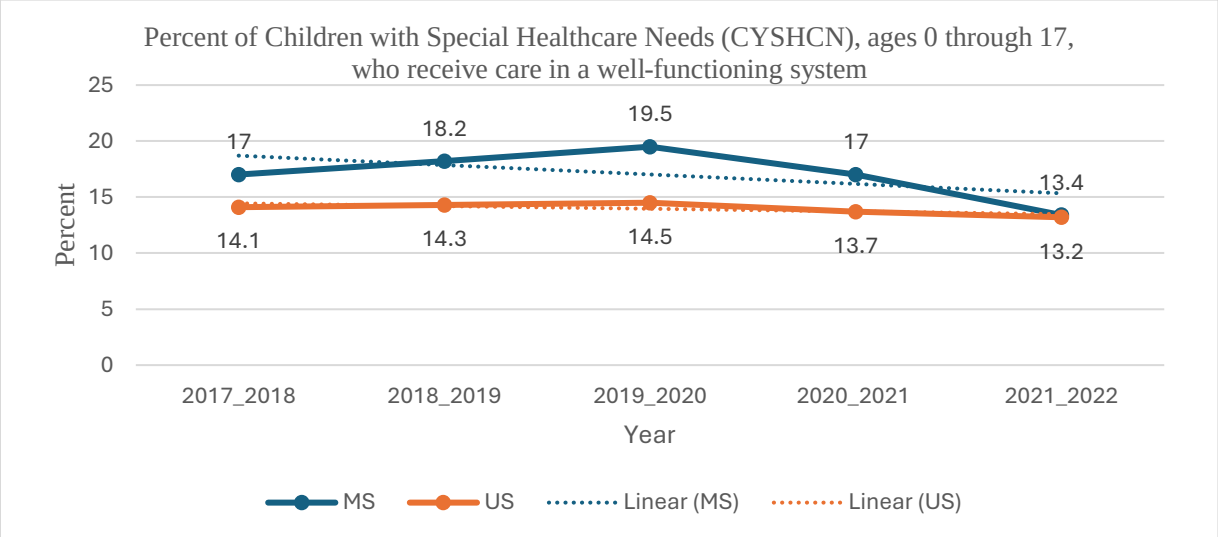
The percentage of children with special health care needs (CYSHCN), ages 0 through 17, who receive care in a well-functioning system in Mississippi increased from 17.0% in 2017-2018 to 19.5 in 2019-2020. By 2021-2022, nevertheless, it had decreased to 13.4%, approaching the national average. The percentage of CYSHCN receiving care in an efficient system has been declining in Mississippi and the United States in recent years. (Table 29 and Figure 29)

Table 29: Percent of children with special health care needs (CYSHCN), ages 0 through 17, who receive care in a well-functioning system

	2017_2018 (95% CI)	**2018_2019 (95% CI)**	**2019_2020 (95% CI)**	**2020_2021 (95% CI)**	**2021_2022 (95% CI)**
MS	17.0 (11.7 - 24.1)	18.2 (13.3 - 24.5)	19.5 (14.4 - 25.9)	17.0 (12.4 - 22.8)	13.4 (10.0-17.7)
US	14.1 (12.9 - 15.3)	14.3 (13.3 - 15.3)	14.5 (13.6 - 15.5)	13.7 (12.8 - 14.6)	13.2 (12.4-14.0)

Based on 95% CI, we cannot conclude that there is a statistically significant increase and decrease in the percentages of children with CYSHCN ages 0 through 17 who received care in a well-functioning system over the years in MS. And the same when compared to the US we cannot conclude that there is a statistically significant higher in MS percentage than the US

Figure 29: Percent of children with special health care needs (CYSHCN), ages 0 through 17, who receive care in a well-functioning system



Data Source: *National Survey of Children's Health (NSCH)*

30: Short Title: Flourishing- Young Child
Full Title: Percent of children, ages 6 months through 5, who are flourishing

The Flourishing Young Child (ages 6 months to 5 years) measure is based on items from the National Survey of Children's Health (NSCH), which assesses young children's social, emotional, and cognitive well-being. The four key flourishing items for young children (ages 6 months to 5 years) are:

1. Curiosity and Discovery:
"Shows interest and curiosity in learning new things."
2. Persistence:
"Works to finish tasks he or she starts."
3. Self-Regulation of Emotions:
"Stays calm and in control when faced with a challenge."
4. Positive Relationships:
"Is affectionate and tender with you."

These items aim to measure a child's early developmental health, which can have long-term impacts on academic success, mental health, and overall well-being.

Percent of children, ages 6 months through 5, who are flourishing

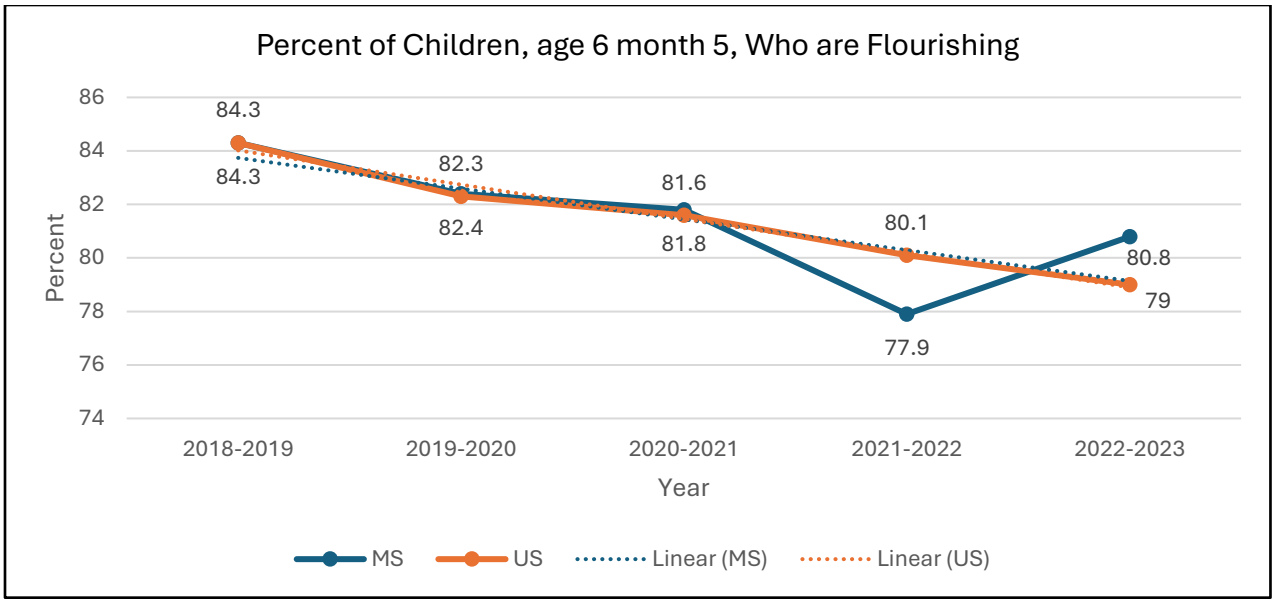
The percentage of children, ages 6 months through 5 years, who are flourishing in MS shows a decrease from 84.3% in 2018-2019 to 80.8% in 2022-2023. Meanwhile, the percentage in the US also shows a decrease from 84.3% in 2018-2019 to 79.0% in 2022-2023. Compared with the US, the percentages in MS are about the same from 2018-2019 to 2020-2021. However, in 2021-2022, the percentage of 77.9% for MS is lower than the percentage of 80.1% in the US, and in 2022-2023, the percentage is 80.8% in MS which is higher than the percentage of 79.0% for the US. (Table 30 and Figure 30)

Table 30: Percent of children, ages 6 months through 5 years, who are flourishing

	2018-2019 (95%CI)	**2019-2020 (95%CI)**	**2020-2021 (95%CI)**	**2021-2022 (95% CI)**	**2022-2023 (95% CI)**
MS	84.3 (77.8-89.2)	82.4 (76.5-87.1)	81.8 (76.8-86)	77.9 (72.2-82.8)	80.8 (74.9-85.5)
US	84.3 (83.0-85.6)	82.3 (80.9-83.5)	81.6 (80.5-82.6)	80.1 (79.1-81.0)	79.0 (78.1-79.9)

Based on a 95% confidence interval (CI), we cannot conclude that the decrease in the percentages of MS from 2018-2019 to 2022-2023 is statistically significant. When comparing with the US, we can't conclude that there are statistical differences in the percentages between MS and the US during these years.

Figure 30: Percent of children, ages 6 months through 5 years, who are flourishing



Data source: National Survey of Children's Health (NSCH)

31: Short Title: Flourishing- Child adolescent
Full Title: Percent of children with and without special health care needs, ages 6 through 17, who are flourishing.

The Flourishing Child/Adolescent (ages 6-17 years) measure is drawn from the National Survey of Children's Health (NSCH) and focuses on social, emotional, and cognitive development. It includes the following three core items:

1. Interest and Curiosity:
"Shows interest and curiosity in learning new things."
2. Self-Regulation of Emotions:
"Stays calm and in control when faced with a challenge."
3. Persistence and Perseverance:
"Finishes tasks and follows through with what he or she starts."

Unlike the measure for younger children, this version does not include a "positive relationships" item, as it focuses more on self-regulation and cognitive development critical for academic and personal growth during childhood and adolescence.

Percent of children with special health care needs, ages 6 through 17, who are flourishing

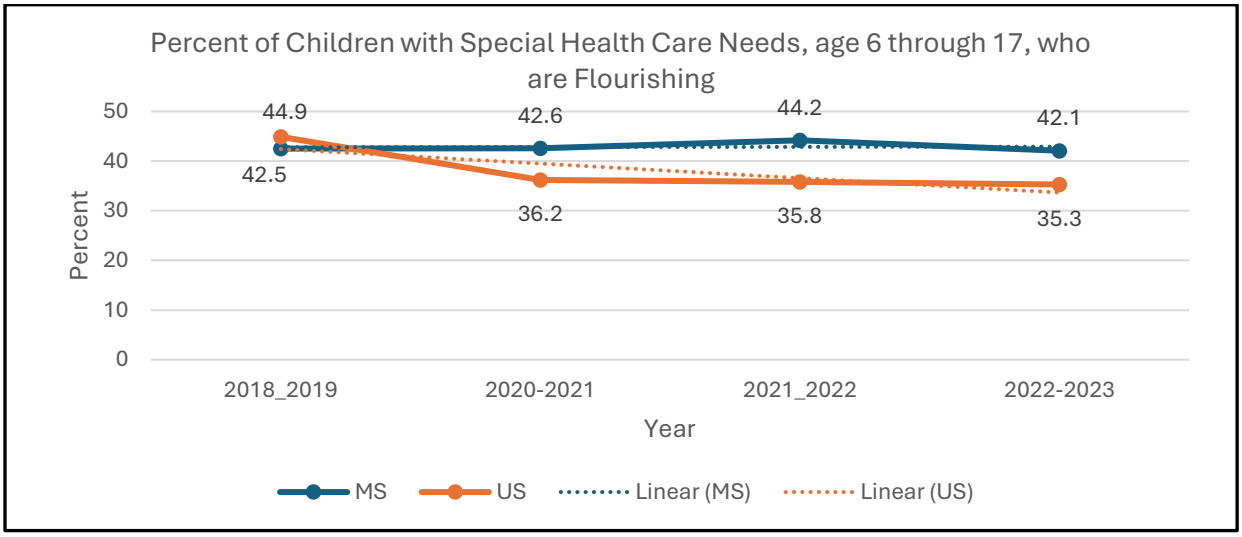
The percentage of children, ages 6 through 17 years, with special health care needs, who are flourishing in MS shows fluctuation with a slight decrease during these years. Meanwhile, the percentage in the US shows a decrease from 44.9% in 2018-2019 to 35.3% in 2022-2023. Compared with the US, the percentage in 2018-2019 in MS is lower than the percentage in the US but higher than the US in the rest of the years. (Table 31.1 and Figure 31.1)

Table 31.1: Percent of children with special health care needs, ages 6 through 17, who are flourishing

	2018_2019 (95% CI)	**2019_2020 (95% CI)**	**2020-2021 (95% CI)**	**2021_2022 (95% CI)**	**2022-2023 (95% CI)**
MS	42.5 (34.8 - 50.6)	-----	42.6 (35.7 - 49.9)	44.2 (37.0 - 51.6)	42.1 (34.7-49.9)
US	44.9 (43.1 - 46.6)	-----	36.2 (34.8 - 37.7)	35.8 (34.5 - 37.2)	35.3 (34.1-36.6)

Based on 95% CI, Mississippi's estimates show a slight fluctuation over time, but we cannot conclude that there are statistically significant differences during the period. Compared with the US, Mississippi's values are higher than the values in the US from 2020_2021 to 2022-2023, but we can't conclude that there are statistically significant differences.

Figure 31.1: Percent of children with special health care needs, ages 6 through 17, who are flourishing



Data Source: National Survey of Children's Health (NSCH)

Note: Data for 2019-2020 are not available.

Percent of children without special health care needs, ages 6 through 17, who are flourishing.

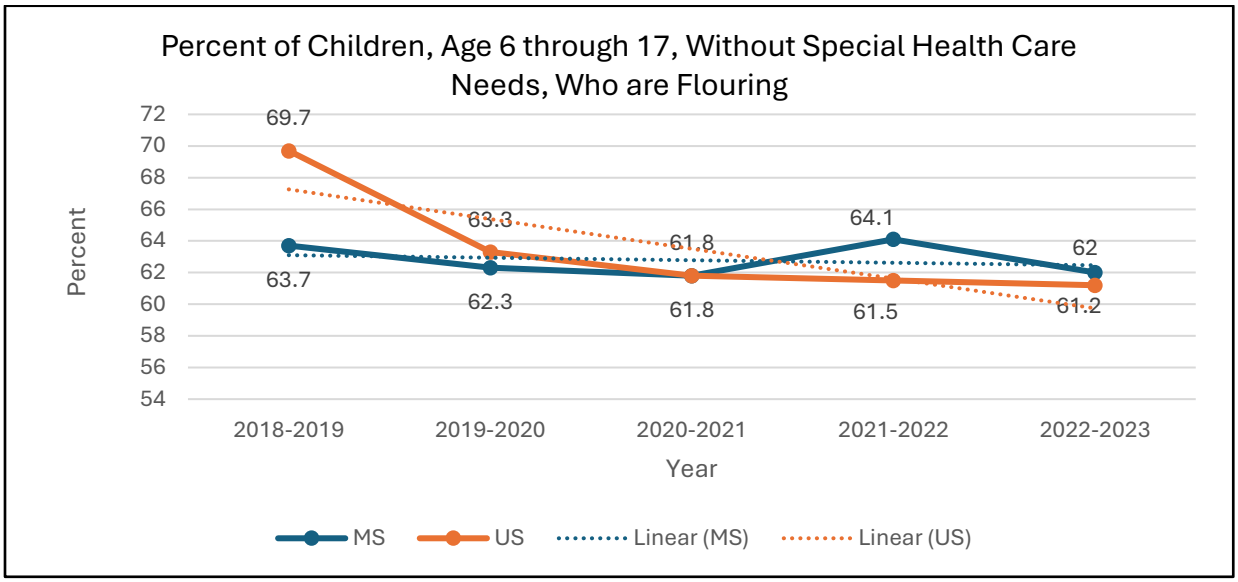
Mississippi's flourishing rates for children without special health care needs started at 63.7% in 2018-2019, showed some fluctuations, and ended at 62.0% by 2022-2023. In contrast, the US began with a higher rate of 69.7% but experienced a notable decline, dropping to 61.2% by 2022-2023. (Table 31.2 and Figure 31.2)

Table 31.2: Percent of children without special health care needs, ages 6 through 17, who are flourishing

	2018_2019 (95% CI)	**2019_2020 (95% CI)**	**2020-2021 (95% CI)**	**2021_2022 (95% CI)**	**2022-2023 (95%CI)**
MS	63.7 (59.4 - 67.8)	62.3 (58.4-66.1)	61.8 (58.0 - 65.5)	64.1 (60.1 - 68.0)	62.0 (57.7-66.0)
US	69.7 (68.8 - 70.6)	63.3 (62.3-64.2)	61.8 (61.0 - 62.7)	61.5 (60.7 - 62.2)	61.2 (60.5-61.9)

Based on 95% CI, Mississippi's estimates show some fluctuations over the years but not statistically significant. while U.S. estimates began higher but then decreased. The confidence intervals for both suggest that there is a statistically significant difference in 2018-2019, but we cannot determine a statistically significant difference in other years between Mississippi and the US.

Figure 31.2: Percent of children without special health care needs, ages 6 through 17, who are flourishing



Data Source: National Survey of Children's Health (NSCH)

32: Short Title: Adverse Childhood Experiences (ACEs)

Full Title: Percent of children, ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur during childhood (0-17 years) and have been linked to negative health and well-being outcomes later in life. The concept of ACEs originated from the CDC-Kaiser Permanente ACE Study and the original ACEs framework includes three main categories with 10 specific experiences:

1. Abuse
   - Physical abuse
   - Emotional abuse
   - Sexual abuse

2. Neglect
   - Physical neglect
   - Emotional neglect

3. Household Challenges/Dysfunction
   - Domestic violence (witnessing violence, particularly toward a parent or caregiver)
   - Substance abuse in the household (parent or household member misusing substances)
   - Mental illness in the household (parent or household member with a mental health condition)
   - Parental separation or divorce
   - Incarcerated household member (parent or close family member in jail or prison)

Impact of ACEs

ACEs have a cumulative "dose-response" relationship with negative outcomes, meaning that the more ACEs a child experiences, the higher the likelihood of experiencing chronic health issues, mental illness, and negative behavioral outcomes in adolescence and adulthood. Examples of long-term outcomes include:
   - Health issues: heart disease, diabetes, and obesity
   - Mental health issues: depression, anxiety, and PTSD
   - Risk behaviors: substance use, risky sexual behavior, and involvement with the justice system

Within the Title V MCH Block Grant, efforts to address ACEs focus on preventing adversity and building resilience. Strategies include promoting protective factors like:
   - Safe, stable, and nurturing relationships
   - Access to early childhood education and positive parenting programs
   - Mental health services and trauma-informed care

The ACEs measure within the Title V MCH Block Grant is derived from the National Survey of Children's Health (NSCH). The survey includes specific questions aimed at identifying the prevalence of ACEs among children and adolescents (ages 0-17). These items

align with the traditional ACEs framework but are tailored to the context of children's well-being.

The ACEs items in the MCH measure generally include the following 9 indicators

1. Economic hardship:
   "Did the child ever live in a household where it was hard to cover the basics like food or housing?"
2. Parental separation or divorce:
   "Has the child ever experienced the separation or divorce of parents or guardians?"
3. Death of a parent or guardian:
   "Has the child ever had a parent or guardian who died?"
4. Parental incarceration:
   "Has the child ever lived with a parent or guardian who served time in jail or prison?"
5. Household substance abuse:
   "Has the child ever lived with a parent or guardian who had a problem with alcohol or drugs?"
6. Household mental illness:
   "Has the child ever lived with a parent or guardian who was mentally ill, severely depressed, or suicidal?"
7. Witnessing domestic violence:
   "Has the child ever seen or heard violence between adults in the home?"
8. Neighborhood violence:
   "Has the child ever experienced or witnessed violence in their neighborhood?"
9. Racial/ethnic discrimination:
   "Has the child ever experienced unfair treatment or discrimination based on race, ethnicity, or other personal characteristics*?"*

Differences from the Traditional ACEs Framework

- The death of a parent/guardian, neighborhood violence, and racial/ethnic discrimination are not part of the original ACEs framework but have been included in the NSCH version to reflect broader social determinants of health.
- The economic hardship item aligns with the concept of poverty-related stress, which can affect children's mental and emotional well-being.

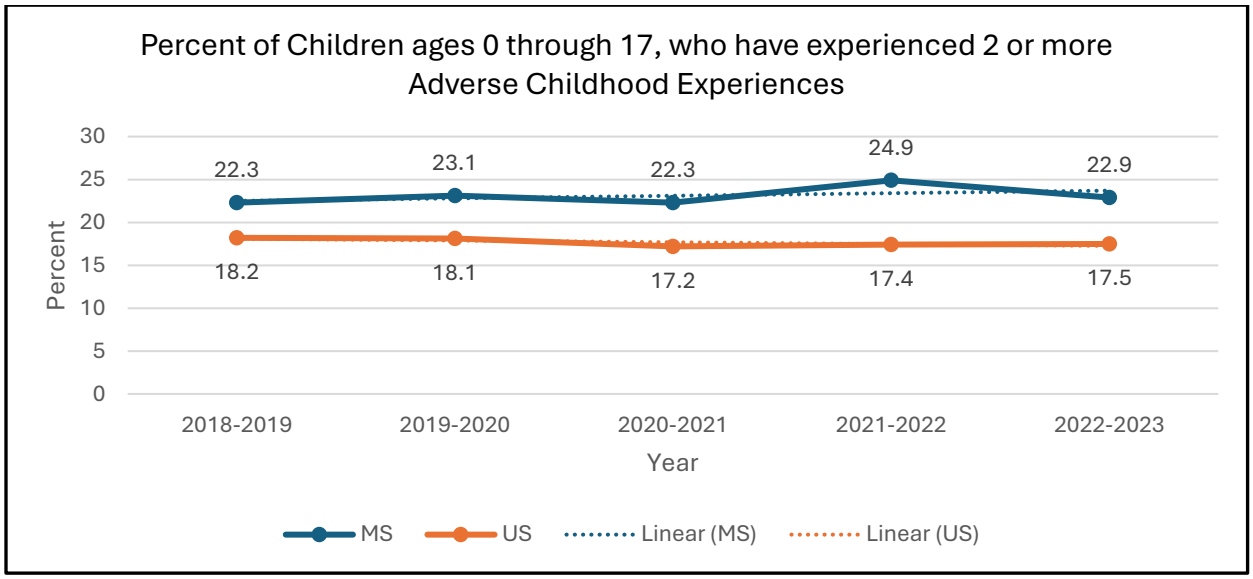
Percentages of children, ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences in MS fluctuate from 2018-2019 to 2022-2023. The percentage in the US has decreased from 18.2% in 2018-2019 to 17.5% in 2022-2023. The percentages in MS are higher than the percentages in the US during these years (Table 32 and Figure 32).

Table 32: Percent of children ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences

	2018-2019 (95%CI)	2019-2020 (95%CI)	2020-2021 (95%CI)	2021-2022 (95% CI)	2022-2023 (95% CI)
MS	22.3 (19.3-25.6)	23.1 (20.2-26.2)	22.3 (19.7-25.2)	24.9 (21.9-28.1)	22.9 (20.0-26.2)
US	18.2 (17.6-18.9)	18.1 (17.5-18.8)	17.2 (16.6-17.8)	17.4 (16.9-17.9)	17.5 (17.0-18.0)

Based on a 95% confidence interval (CI), we can't conclude that there are statistically significant differences in MS during these years. When compared with the US, we can conclude that the percentages in MS are statistically significantly higher than the percentages in the US for all these years.

Figure 32: Percent of children ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences



Data source: National Survey of Children's Health (NSCH)

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