

**Alabama Smiles 2020-2022**  
**An Oral Health Survey of Alabama's Kindergarten and Third Grade Children**  
**DATA TABLES**

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**Definitions:**

- **Decay experience** is defined as having untreated decay or a dental filling, crown, or other type of restorative dental material. This definition includes teeth that were extracted because of tooth decay. Decay experience in the primary and/or permanent dentition is a Council of State and Territorial Epidemiologist (CSTE) approved indicator for the National Oral Health Surveillance System (NOHSS).
- **Untreated decay** is defined as having dental cavities or tooth decay that have not received appropriate treatment. Untreated decay in the primary and/or permanent dentition is a CSTE approved indicator for NOHSS.
- **Treated decay** is defined as having a dental filling, crown, or a tooth extracted because of decay.
- **Early or urgent dental care** is defined as a child who needs restorative dental care.
- **Urgent dental care** is defined as a child who needs restorative dental care within the next 24-48 hours because of pain or infection.
- **Dental sealants** are plastic-like coatings that are applied to the chewing surfaces of back teeth. The applied sealant resin bonds into the grooves of teeth to form a protective physical barrier. Dental sealants on permanent molars is a CSTE approved indicator for NOHSS. Because most kindergarten children do not have permanent molars, detailed information on dental sealants is not provided.
- **National School Lunch Program (NSLP):** A federally assisted meal program that provides nutritionally balanced, low-cost, or free lunches to children each school day. The 2021-2022 income eligibility guidelines for the NSLP can be found at the following site: <https://www.federalregister.gov/documents/2021/03/04/2021-04452/child-nutrition-programs-income-eligibility-guidelines>

**Sampling and Data Analysis:**

- The sampling frame for this survey was all non-virtual public schools with 20 or more students in 3<sup>rd</sup> grade (657 schools with 54,507 3<sup>rd</sup> grade students). The sampling frame was stratified by public health region (refer to Appendix 1), then schools within each stratum were ordered by percent of students eligible for the National School Lunch Program (NSLP). A systematic probability proportional to size cluster sampling scheme was used to select 50 schools with 3<sup>rd</sup> grade students. Three of the selected schools did not have kindergarten so the appropriate feeder schools were added to the sample (53 schools representing 50 sampling intervals). In May

2021, the state decided to oversample the smaller regions – 3 additional schools were selected in the Southeastern, Southwestern, and West Central regions. This resulted in 62 schools representing 50 sampling intervals.

- Fifty-two (52) schools participated, and data is available for 44 of the 50 sampling intervals. Data are not available for the following six sampling intervals

Region	Percentage of Students Eligible for the National School Lunch Program
Jefferson	19.4%
Jefferson	65.8%
Jefferson	69.5%
Northern	32.0%
Northern	47.8%
Southeastern	93.8%

- Children were screened during the 2020-2021 and 2021-2022 school years using a combination of active and passive consent.
- A total of 2,957 out of 4,411 enrolled kindergarten and 2,607 out of 4,460 enrolled 3<sup>rd</sup> grade children received an oral health screening for a response rate of 67% for kindergarten and 58% for 3<sup>rd</sup> grade children (overall response rate of 63%).
- Data analyses were completed using the complex survey procedures within SAS 9.4.
  - Strata = health region
  - Cluster = school
- The data were weighted to represent the kindergarten and 3<sup>rd</sup> grade population within each sampling interval
  - Weight = total # of children in sampling interval / # children screened in sampling interval
- All data presented have been adjusted for the sampling scheme and non-response within each school.

Population	# Schools	# 3 <sup>rd</sup> Graders	NSLP%	Percent Black	Percent Hispanic	Percent White
All schools in sampling frame (3 <sup>rd</sup> grade)	657	54,507	54.0%	32%	8%	54%
Participating schools (3 <sup>rd</sup> grade)	52	4,460	51%	29%	10%	55%
Children screened (3 <sup>rd</sup> grade)	52	3607	NC	33%	7%	52%

Source: Alabama State Department of Education 2018-2019 enrollment data and oral health survey data

NSLP = National School Lunch Program

NC = Not collected

## QUICK FACTS

### Decay Experience:

- ➔ Forty-one percent (41%) of Alabama's kindergarten children have at least one tooth with decay experience, similar to the national average of 42%.
- ➔ Fifty percent (50%) of Alabama's third grade children have at least one tooth with decay experience, lower than the national average of 60%.

### Untreated Tooth Decay:

- ➔ Twenty-two percent (22%) of Alabama's kindergarten children have untreated tooth decay, higher than the national average of 15%.
- ➔ Twenty-three percent (23%) of Alabama's third grade children have untreated tooth decay, higher than the national average of 20%.

### Protective Dental Sealants:

- ➔ Only 10% of Alabama's third grade children have protective dental sealants, substantially lower than the national average of 42%.

### Need for Dental Care

- ➔ Of the 1,166 kindergarten children with decay experience, 46% have had all their teeth treated, 16% have had some teeth treated and 38% have untreated decay without any evidence of treated decay.
- ➔ Of the 1,274 third grade children with decay experience, 54% have had all their teeth treated, 20% have had some teeth treated and 26% have untreated decay without any evidence of treated decay.

### Oral Health Disparities:

- ➔ In Alabama, there are significant oral health disparities. Compared to children attending higher income schools, children attending lower income schools have a significantly higher prevalence of both decay experience and untreated decay. Compared to non-Hispanic White and non-Hispanic Black children, Hispanic/Latinx children have a significantly higher prevalence of decay experience. Non-Hispanic Black children, when compared to non-Hispanic White children, have a significantly lower prevalence of protective dental sealants.

### Trends Over Time:

- Since Alabama's previous oral health survey in 2011-2013, the percentage of third grade children with decay experience has decreased from 58% to 50% ( $p < 0.05$ ).
- The disparities gap is narrowing for Black/African American children. In 2011-2013, the prevalence of decay experience among Alabama's kindergarten and third grade children was 7.6 percentage points higher for Black/African American children compared to non-Hispanic White children. In 2020-2022, the percentage point difference has been reduced to 4.3. Between 2011-2013 and 2020-2022, Black/African American children had a 12% relative improvement in the prevalence of decay experience while non-Hispanic White children had a 7% relative improvement.
- Unfortunately, there has been a significant decrease in the prevalence of protective dental sealants among Alabama's third grade children. In 2011-2013, 29% had sealants compared to only 10% in 2020-2022. This could be partially due to limited access to preventive dental services during the COVID-19 pandemic.

Figure 1: Percentage of **Kindergarden** Children with Decay Experience and Untreated Decay; Alabama (2020-2022) Compared to U.S. Average for 5-year old children (NHANES 2011-2016)

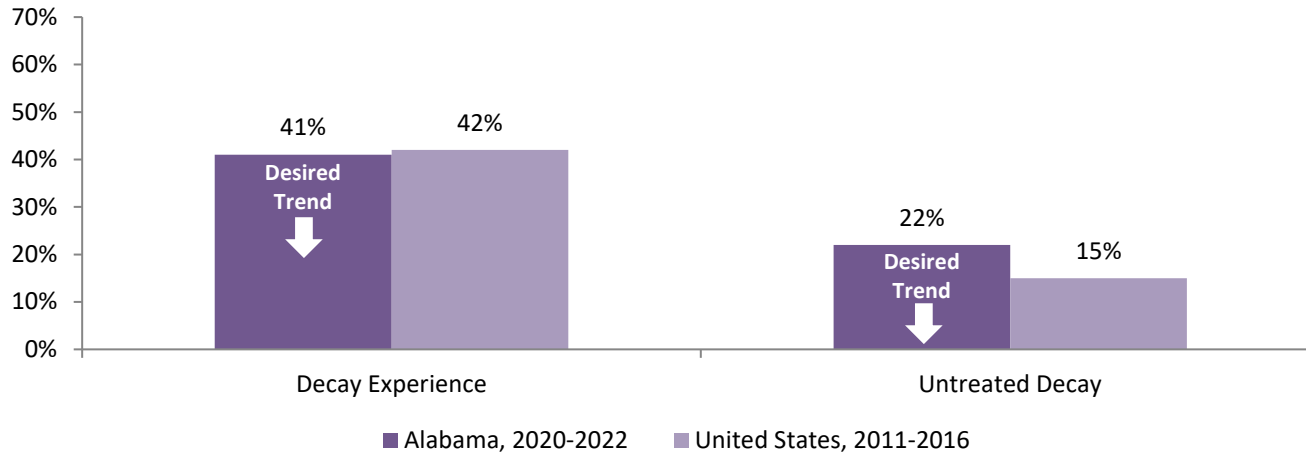
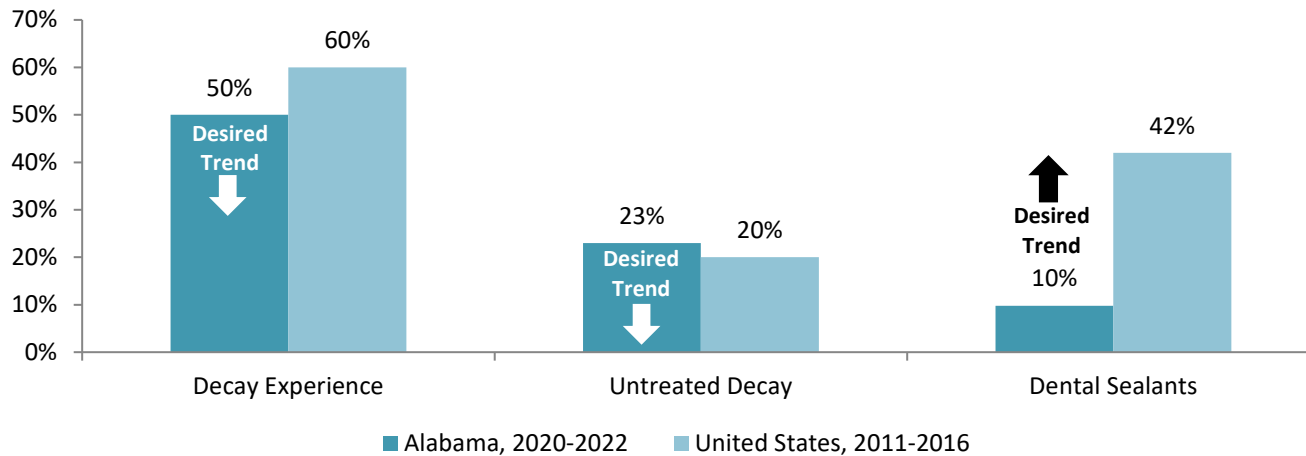


Figure 2: Percentage of **3rd Grade** Children with Decay Experience, Untreated Decay and Dental Sealants; Alabama (2020-2022) Compared to U.S. Average (NHANES 2011-2016)



Data source for national data: National Health and Nutrition Examination Survey (NHANES) 2011-2016. Secondary analyses of public datasets.

Table 1: Demographic characteristics of participating kindergarten and 3<sup>rd</sup> grade children, 2020-2022

Characteristic	Kindergarten Children (n=2,957)		Third Grade Children (n=2,607)		Both Grades (n=5,564)	
	# Of Children	Weighted Percent	# Of Children	Weighted Percent	# Of Children	Weighted Percent
<b>Age</b>						
5 years	1,251	44.6	0	.	1,251	23.0
6 years	1,382	45.6	0	.	1,382	23.5
7 years	67	2.2	4	0.2	71	1.2
8 years	0	.	932	37.9	932	18.4
9 years	0	.	1,245	48.0	1,245	23.2
10 years	0	.	190	5.7	190	2.8
11 years	0	.	2	0.1	2	0.0
Missing/Unknown	257	7.7	234	8.1	491	7.9
<b>Gender</b>						
Male	1,523	51.8	1,397	52.5	2,920	52.1
Female	1,433	48.2	1,210	47.5	2,643	47.9
Missing/Unknown	1	0.0	0	.	1	0.0
<b>Race/Ethnicity</b>						
White	1,569	53.3	1,430	50.2	2,999	51.8
Black/African American	753	31.3	682	35.6	1,435	33.4
Hispanic/Latinx	376	7.1	297	6.8	673	6.9
Asian	28	0.9	27	1.2	55	1.0
American Indian/Alaska Native	49	0.9	56	1.5	105	1.2
Native Hawaiian/Pacific Islander	14	0.4	6	0.2	20	0.3
Multi-racial	66	2.2	33	1.3	99	1.8
Unknown/Missing	102	3.9	76	3.2	178	3.6
<b>NSLP Participation</b>						
< 25% of students	344	7.7	290	8.2	634	7.9
25-49% of students	1,089	26.8	991	28.6	2,080	27.7
50-74% of students	1,216	51.1	1,046	47.2	2,262	49.2
≥ 75% of students	308	14.4	280	16.1	588	15.2
<b>Region</b>						
East Central	322	13.4	285	14.3	607	13.8
Jefferson	148	7.7	148	8.2	296	7.9
Mobile	394	9.6	320	8.2	714	8.9
Northeastern	553	15.3	485	16.3	1,038	15.8
Northern	668	17.2	559	18.4	1,227	17.8
Southeastern	232	6.7	235	7.1	467	6.9
Southwestern	322	12.4	276	13.7	598	13.0
West Central	318	17.7	299	13.8	617	15.8

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

Table 2: Oral health of Alabama’s kindergarten and 3rd grade children, 2020-2022

Characteristic	Kindergarten (n=2,956)*			Third Grade (n=2,606)*			Both Grades (n=5,562)*		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
Decay experience (%)	40.8	37.0	44.6	50.2	46.1	54.2	45.3	41.9	48.8
Untreated decay (%)	21.9	18.7	25.0	23.1	20.1	26.1	22.5	19.8	25.1
Treated decay (%)	25.5	22.8	28.2	37.0	33.0	41.0	31.1	28.2	33.9
Sealants (%)	1.7	0.8	2.5	9.8	7.5	12.1	--	--	--
Treatment urgency (%)									
None	80.0	77.0	83.1	77.9	74.8	80.9	79.0	76.4	81.6
Early care needed	16.6	13.7	19.5	18.9	16.6	21.1	17.7	15.5	19.9
Urgent care needed	3.3	2.3	4.4	3.3	2.0	4.5	3.3	2.5	4.1
Needs early/urgent treatment	20.0	16.9	23.0	22.1	19.1	25.2	21.0	18.4	23.6

\* One kindergarten and one third grade student did not participate in the oral health portion of the survey

**NOTE:** Because many kindergarten children do not have permanent first molars, information on the prevalence of dental sealants for kindergarten and 3<sup>rd</sup> grade combined is not presented.

Table 3: Percentage of Alabama' kindergarten and 3<sup>rd</sup> grade children with *decay experience* (treated and/or untreated decay) by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)			Both Grades (n=5,562)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	<b>40.8</b>	<b>37.0</b>	<b>44.6</b>	<b>50.2</b>	<b>46.1</b>	<b>54.2</b>	<b>45.3</b>	<b>41.9</b>	<b>48.8</b>
<b>Gender</b>									
Male	42.0	37.2	46.9	52.0	47.8	56.2	46.9	43.0	50.7
Female	39.6	35.4	43.7	48.2	42.9	53.5	43.7	39.7	47.7
<b>Race/Ethnicity</b>									
Black/African American	43.1	38.9	47.4	50.8	44.8	56.8	47.1	43.3	50.8
Hispanic/Latinx	54.9	47.3	62.5	63.1	53.6	72.7	58.8	53.1	64.5
White	37.6	31.9	43.2	48.8	43.2	54.3	42.8	37.8	47.9
Another race or multi-racial	51.5	42.2	60.8	42.8	26.3	59.2	47.4	37.2	57.5
<b>NSLP Participation</b>									
< 25% of students	23.8	15.9	31.7	36.0	30.8	41.2	29.9	23.3	36.4
25-49% of students	33.1	26.7	39.5	44.0	36.8	51.2	38.5	32.1	45.0
50-74% of students	45.4	41.6	49.1	53.2	48.6	57.8	49.0	45.6	52.4
≥ 75% of students	48.1	40.5	55.8	59.5	46.9	72.2	54.0	47.8	60.1
<b>Region</b>									
East Central	36.1	29.1	43.0	43.7	36.8	50.5	39.9	33.5	46.3
Jefferson	34.3	26.0	42.5	37.5	25.0	50.0	35.9	27.4	44.3
Mobile	45.8	33.4	58.1	56.7	31.9	81.4	50.6	34.0	67.2
Northeastern	45.4	33.3	57.6	48.3	37.3	59.3	46.9	37.8	56.0
Northern	33.5	25.0	41.9	49.4	39.5	59.2	41.4	32.8	50.0
Southeastern	36.2	24.9	47.4	48.0	38.4	57.6	42.1	33.5	50.7
Southwestern	44.3	32.2	56.5	54.4	43.8	64.9	49.4	38.4	60.5
West Central	47.1	41.4	52.8	60.7	56.8	64.6	52.9	48.7	57.0

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

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



## Decay Experience:

### Related Healthy People 2020 Objective

OH-1.2: Reduce the proportion of children aged 6-9 years who have dental caries experience in their primary or permanent teeth.

- Baseline: 54.4% in 1999–2004
- Target: 49.0%
- ***Alabama met the HP 2020 objective for decay experience***

### Current National Estimates (NHANES, 2011-2016) <sup>1</sup>

- 42.1% of 5-year-old children had decay experience in 2011-2016 (95% CI: 35.9-48.5)
- 59.5% of children in 3<sup>rd</sup> grade had decay experience in 2011-2016 (95% CI: 54.0-64.7)
- ***The percentage of Alabama's children with decay experience is below the national average***

### Disparities

- Socioeconomic:
  - Compared to children attending higher income schools (< 50% of students are eligible for the NSLP), children attending schools with  $\geq$  50% of children eligible for NSLP have a significantly higher prevalence of decay experience.
- Race/Ethnicity:
  - When compared to non-Hispanic White and non-Hispanic Black children, Hispanic/Latinx children have a significantly higher prevalence of decay experience.
- Geographic:
  - The prevalence of decay experience is highest in the West Central region and lowest in the Jefferson region.

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<sup>1</sup> National Health and Nutrition Examination Survey (NHANES) 2011-2016. Secondary analyses of public datasets.

Table 4: Percentage of Alabama’s kindergarten and 3<sup>rd</sup> grade children with *untreated decay* by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)			Both Grades (n=5,562)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	<b>21.9</b>	<b>18.7</b>	<b>25.0</b>	<b>23.1</b>	<b>20.1</b>	<b>26.1</b>	<b>22.5</b>	<b>19.8</b>	<b>25.1</b>
<b>Gender</b>									
Male	24.8	20.8	28.7	24.2	20.2	28.2	24.5	21.3	27.7
Female	18.8	15.2	22.3	21.9	17.9	26.0	20.3	17.4	23.2
<b>Race/Ethnicity</b>									
Black/African American	24.6	20.3	29.0	23.1	18.4	27.8	23.8	20.5	27.2
Hispanic/Latinx	25.7	18.8	32.5	35.6	23.7	47.6	30.4	21.8	38.9
White	20.2	15.7	24.6	22.9	18.4	27.4	21.5	17.7	25.2
Another race or multi-racial	22.4	12.5	32.2	11.8	5.6	17.9	17.3	10.6	24.0
<b>NSLP Participation</b>									
< 25% of students	10.2	4.9	15.5	13.0	9.1	16.9	11.6	8.1	15.1
25-49% of students	14.5	9.2	19.8	18.3	13.0	23.5	16.4	11.6	21.2
50-74% of students	25.3	21.6	29.0	24.6	21.3	27.8	25.0	22.0	27.9
≥ 75% of students	29.6	24.6	34.6	32.6	20.5	44.7	31.1	24.4	37.8
<b>Region</b>									
East Central	19.4	9.1	29.7	22.1	14.4	29.8	20.8	12.4	29.1
Jefferson	12.4	4.2	20.7	9.5	6.4	12.6	11.0	5.7	16.2
Mobile	26.2	14.6	37.7	20.6	6.3	34.8	23.7	11.5	35.9
Northeastern	22.6	14.3	30.8	20.3	15.5	25.1	21.5	16.2	26.7
Northern	15.6	9.3	21.9	26.1	15.9	36.4	20.8	12.9	28.8
Southeastern	18.1	10.4	25.8	20.3	13.0	27.7	19.2	11.8	26.7
Southwestern	29.1	20.5	37.6	31.5	20.0	42.9	30.3	23.5	37.1
West Central	27.3	23.3	31.3	26.3	23.8	28.8	26.9	24.5	29.2

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

Untreated decay: Dental cavities or tooth decay that have not received appropriate treatment.

## Untreated Decay:

### Related Healthy People 2020 Objective

**OH-2.2:** Reduce the proportion of children aged 6-9 years with untreated dental decay

- Baseline: 28.8% in 1999–2004
- Target: 25.9 %
- ***Alabama met the HP 2020 objective for untreated decay***

### Current National Estimates (NHANES, 2011-2016) <sup>2</sup>

- 15.0% of 5-year-old children had untreated decay in 2011-2016 (95% CI: 11.9-18.7)
- 19.9% of children in 3<sup>rd</sup> grade had untreated decay in 2011-2016 (95% CI: 16.3-24.0)
- ***Compared to national averages, children in Alabama have a higher prevalence of untreated decay***

### Disparities

- Socioeconomic:
  - Compared to children attending higher income schools (< 50% of students are eligible for the NSLP), children attending schools with  $\geq$  50% of children eligible for NSLP have a significantly higher prevalence of untreated decay.
- Race/Ethnicity:
  - Although Hispanic/Latinx children have the highest prevalence of untreated decay, the difference is not statistically significant.
- Geographic:
  - The prevalence of untreated decay is highest in the Southwestern region and lowest in the Jefferson region.

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<sup>2</sup> National Health and Nutrition Examination Survey (NHANES) 2011-2016. Secondary analyses of public datasets.

Table 5: Percentage of Alabama’s kindergarten and 3<sup>rd</sup> grade children with *dental sealants* by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	1.7	0.8	2.5	9.8	7.5	12.1
<b>Gender</b>						
Male	1.2	0.5	1.8	10.4	7.6	13.3
Female	2.2	1.0	3.4	9.1	6.4	11.8
<b>Race/Ethnicity</b>						
Black/African American	1.4	0.3	2.4	6.1	3.4	8.8
Hispanic/Latinx	2.0	0.0	4.0	10.6	3.8	17.4
White	1.9	0.9	3.0	11.9	9.3	14.5
Another race or multi-racial	0.3	-0.3	1.0	16.5	6.2	26.9
<b>NSLP Participation</b>						
< 25% of students	0.9	-0.3	2.1	13.8	4.6	22.9
25-49% of students	1.7	0.1	3.3	11.7	6.8	16.6
50-74% of students	1.7	0.7	2.8	7.8	5.5	10.2
≥ 75% of students	1.7	-0.4	3.8	10.2	3.5	16.8
<b>Region</b>						
East Central	1.5	-1.5	4.5	5.0	0.4	9.7
Jefferson	0.6	-0.6	1.7	10.4	1.9	18.9
Mobile	3.0	0.5	5.5	13.5	3.8	23.2
Northeastern	1.5	0.5	2.5	13.0	4.6	21.4
Northern	1.3	-0.6	3.2	10.0	4.4	15.6
Southeastern	2.9	-2.1	7.9	7.4	-0.4	15.2
Southwestern	1.9	-1.4	5.1	7.6	3.5	11.7
West Central	1.4	0.9	1.9	11.6	7.2	16.1

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

Dental Sealants: Plastic-like coatings that are applied to the chewing surfaces of back teeth. The applied sealant resin bonds into the grooves of teeth to form a protective physical barrier.

**NOTE:** Because many kindergarten children do not have permanent first molars, information on the prevalence of dental sealants for both grades combined is not presented.

## Dental Sealants:

### Related Healthy People 2020 Objective

**OH-12.2:** Increase the proportion of children aged 6 to 9 years who have received dental sealants on one or more of their permanent first molar teeth

- Baseline: 25.5% in 1999–2004
- Target: 28.1%
- ***Alabama did not meet the HP 2020 objective for dental sealants***

### Current National Estimates (NHANES, 2011-2016)<sup>3</sup>

- 41.5% of children in 3<sup>rd</sup> grade had dental sealants in 2011-2016 (95% CI: 36.8-46.3)
- ***The percentage of Alabama's 3<sup>rd</sup> grade children with dental sealants is substantially below the national average (10% vs. 42%)***

### Disparities

- Socioeconomic:
  - None
- Race/Ethnicity:
  - Compared to White children, Black/African American children have a significantly lower prevalence of dental sealants.
- Geographic:
  - None

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<sup>3</sup> National Health and Nutrition Examination Survey (NHANES) 2011-2016. Secondary analyses of public datasets.

Table 6: Percentage of Alabama’s kindergarten and 3<sup>rd</sup> grade children *needing early or urgent dental care* by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)			Both Grades (n=5,562)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	20.0	16.9	23.0	22.1	19.1	25.2	21.0	18.4	23.6
<b>Gender</b>									
Male	22.6	19.2	26.0	23.5	19.4	27.6	23.0	20.1	26.0
Female	17.1	13.5	20.7	20.6	16.7	24.6	18.8	15.7	21.9
<b>Race/Ethnicity</b>									
Black/African American	24.1	19.5	28.8	22.9	18.6	27.2	23.5	19.9	27.1
Hispanic/Latinx	24.9	18.9	30.9	33.6	21.7	45.6	29.0	21.2	36.8
White	17.2	13.5	21.0	21.4	16.9	26.0	19.2	15.8	22.6
Another race or multi-racial	20.1	11.5	28.8	12.0	5.8	18.2	16.3	10.8	21.8
<b>NSLP Participation</b>									
< 25% of students	10.0	5.0	15.0	12.7	7.5	17.8	11.3	7.7	15.0
25-49% of students	14.2	8.8	19.7	17.6	12.1	23.2	15.9	10.9	20.9
50-74% of students	22.2	17.4	27.0	23.1	19.6	26.6	22.6	19.2	26.0
≥ 75% of students	28.0	21.5	34.5	32.2	19.8	44.6	30.1	22.6	37.7
<b>Region</b>									
East Central	19.2	9.3	29.1	22.2	15.0	29.4	20.7	12.6	28.8
Jefferson	11.9	4.0	19.7	8.4	4.2	12.6	10.1	4.6	15.6
Mobile	26.2	14.4	38.1	21.4	7.5	35.2	24.1	11.9	36.2
Northeastern	22.8	14.5	31.0	20.4	15.7	25.2	21.6	16.5	26.8
Northern	14.6	9.2	20.1	26.0	15.4	36.7	20.3	12.6	28.0
Southeastern	19.4	11.2	27.6	21.1	11.0	31.1	20.2	11.5	28.9
Southwestern	29.7	21.5	37.9	31.9	21.0	42.8	30.8	23.1	38.5
West Central	16.7	11.4	22.1	18.3	13.4	23.3	17.4	15.4	19.5

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

Early or urgent dental care: Child needs to see a dentist within the next few weeks for dental care.

## Need for Early or Urgent Dental Care:

### Related Healthy People 2020 Objective

- None

### Current National Estimate

- None

### Disparities

- Socioeconomic:
  - Compared to children attending higher income schools (< 50% of students are eligible for the NSLP), children attending schools with  $\geq 75\%$  of children eligible for NSLP are significantly more likely to need restorative dental care.
- Race/Ethnicity:
  - Although Hispanic/Latinx children are more likely to need restorative dental care, the difference is not statistically significant.
- Geographic:
  - The prevalence of untreated decay is highest in the Southwestern region and lowest in the Jefferson region.

Table 7: Percentage of Alabama’s kindergarten and 3<sup>rd</sup> grade children needing *urgent dental care* by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)			Both Grades (n=5,562)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	3.3%	2.3%	4.4%	3.3%	2.0%	4.5%	3.3%	2.5%	4.1%
<b>Gender</b>									
Male	3.5%	2.2%	4.9%	3.5%	1.7%	5.3%	3.5%	2.4%	4.7%
Female	3.1%	2.0%	4.3%	3.0%	1.6%	4.3%	3.1%	2.2%	3.9%
<b>Race/Ethnicity</b>									
Black/African American	2.7%	1.2%	4.2%	4.0%	2.0%	5.9%	3.4%	2.1%	4.6%
Hispanic/Latinx	8.6%	3.7%	13.5%	10.3%	2.6%	17.9%	9.4%	5.2%	13.6%
White	3.3%	2.1%	4.5%	1.9%	0.9%	2.9%	2.7%	1.9%	3.5%
Another race or multi-racial	0.4%	-0.3%	1.1%	2.6%	-0.2%	5.4%	1.4%	0.1%	2.7%
<b>NSLP Participation</b>									
< 25% of students	2.5%	1.6%	3.5%	0.0%	0.0%	0.0%	1.3%	0.8%	1.7%
25-49% of students	2.1%	0.7%	3.6%	2.4%	0.6%	4.1%	2.3%	1.1%	3.4%
50-74% of students	4.1%	2.8%	5.3%	3.5%	1.6%	5.5%	3.8%	2.8%	4.9%
≥ 75% of students	3.4%	0.4%	6.4%	5.7%	2.0%	9.3%	4.5%	1.3%	7.8%
<b>Region</b>									
East Central	3.6%	0.1%	7.1%	5.8%	0.3%	11.4%	4.7%	0.6%	8.8%
Jefferson	3.4%	-0.5%	7.3%	0.0%	0.0%	0.0%	1.7%	-0.3%	3.6%
Mobile	3.2%	1.2%	5.2%	4.5%	-0.6%	9.5%	3.7%	1.7%	5.7%
Northeastern	2.0%	0.4%	3.5%	1.1%	-0.1%	2.3%	1.5%	0.4%	2.7%
Northern	3.3%	1.4%	5.3%	5.1%	1.5%	8.8%	4.2%	1.9%	6.6%
Southeastern	3.0%	0.8%	5.2%	3.1%	-1.1%	7.3%	3.0%	0.5%	5.5%
Southwestern	3.1%	-1.6%	7.7%	2.9%	0.7%	5.2%	3.0%	1.1%	4.9%
West Central	4.7%	2.9%	6.5%	2.3%	0.7%	3.9%	3.7%	2.7%	4.6%

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

Urgent dental care: Child needs to see a dentist within 24-48 hours because of pain or infection.



## Need for Urgent Dental Care:

### Related Healthy People 2020 Objective

- None

### Current National Estimate

- None

### Disparities

- Socioeconomic:
  - Compared to children attending the highest income schools (< 25% of students are eligible for the NSLP), children attending schools with  $\geq 50\%$  of children eligible for NSLP are significantly more likely to need urgent dental care.
- Race/Ethnicity:
  - Compared to non-Hispanic White and non-Hispanic Black children, Hispanic/Latinx children are more likely to need urgent dental care.
- Geographic:
  - None

Table 9: Percentage of Alabama’s kindergarten and 3<sup>rd</sup> grade children with *treated decay* by selected characteristics, 2020-2022

Characteristic	Kindergarten (n=2,956)			Third Grade (n=2,606)			Both Grades (n=5,562)		
	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL	Percent (% yes)	Lower 95% CL	Upper 95% CL
<b>ALL CHILDREN</b>	25.5%	22.8%	28.2%	37.0%	33.0%	41.0%	31.1%	28.2%	33.9%
<b>Gender</b>									
Male	24.8%	21.2%	28.5%	38.3%	33.9%	42.6%	31.4%	28.1%	34.7%
Female	26.3%	22.6%	29.9%	35.6%	30.7%	40.6%	30.8%	27.0%	34.5%
<b>Race/Ethnicity</b>									
Black/African American	26.6%	22.8%	30.5%	38.7%	31.4%	45.9%	32.8%	28.1%	37.6%
Hispanic/Latinx	34.5%	28.3%	40.7%	41.3%	29.4%	53.1%	37.7%	30.1%	45.3%
White	23.2%	19.7%	26.7%	35.4%	30.8%	39.9%	28.9%	25.5%	32.3%
Another race or multi-racial	37.6%	29.4%	45.8%	35.6%	21.6%	49.7%	36.7%	28.7%	44.6%
<b>NSLP Participation</b>									
< 25% of students	17.2%	10.9%	23.4%	31.2%	25.4%	37.0%	24.2%	18.5%	29.9%
25-49% of students	22.2%	17.9%	26.5%	32.9%	27.4%	38.4%	27.5%	23.4%	31.7%
50-74% of students	27.9%	24.6%	31.2%	39.3%	34.6%	44.0%	33.2%	29.9%	36.5%
≥ 75% of students	27.6%	17.8%	37.4%	40.6%	23.8%	57.4%	34.3%	22.4%	46.1%
<b>Region</b>									
East Central	19.9%	16.3%	23.5%	28.5%	22.2%	34.8%	24.2%	20.6%	27.9%
Jefferson	24.2%	20.5%	27.9%	31.5%	19.9%	43.0%	27.8%	23.4%	32.2%
Mobile	28.6%	22.9%	34.3%	44.4%	23.2%	65.7%	35.7%	24.5%	46.8%
Northeastern	28.1%	21.3%	34.9%	36.9%	25.5%	48.2%	32.5%	25.0%	40.0%
Northern	22.7%	16.3%	29.2%	34.1%	28.7%	39.5%	28.4%	23.4%	33.3%
Southeastern	20.3%	6.4%	34.1%	33.0%	25.7%	40.2%	26.6%	16.6%	36.7%
Southwestern	28.2%	16.4%	39.9%	39.6%	24.3%	54.9%	34.0%	20.6%	47.4%
West Central	29.2%	24.6%	33.8%	48.3%	42.5%	54.1%	37.3%	33.9%	40.7%

NSLP= National School Lunch Program (also referred to as the Free/Reduced Price Lunch Program)

**Related Healthy People 2020 Objective**

None

**Current National Estimate**

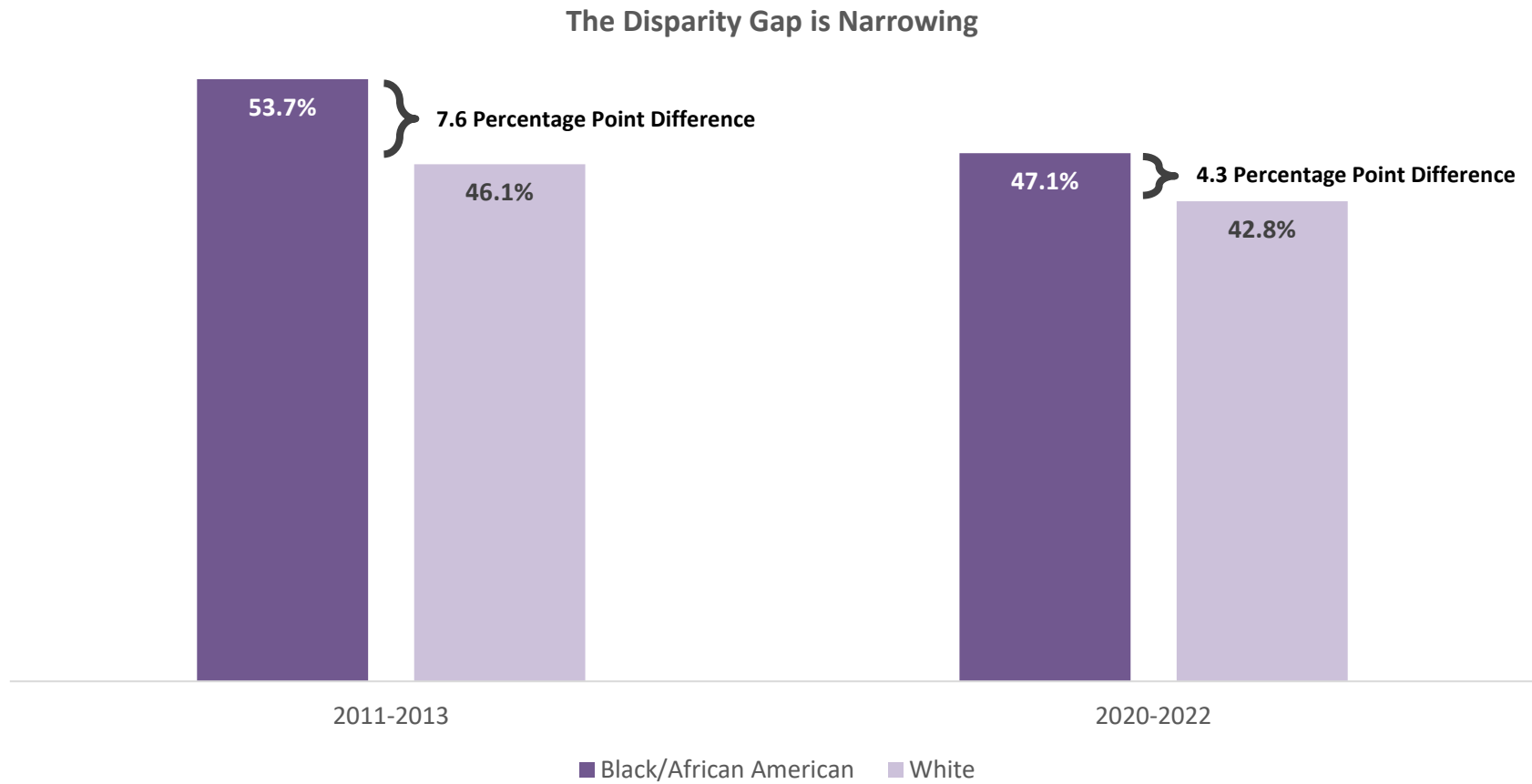
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Table 10: Trends over time – oral health of Alabama’s kindergarten and third grade children – 2011-13 vs. 2020-2022

Characteristic	2011-2013 Number/Percentage (95% Confidence Interval)	2020-2022 Number/Percentage (95% Confidence Interval)
<b>Number Screened</b>		
Kindergarten	4,953	2,956
Third grade	4,104	2,606
<b>Race/Ethnicity of Participating Children</b>		
Black/African American	32.5	33.4
Hispanic/Latinx	5.7	6.9
White	57.0	51.8
<b>Percentage with Decay Experience</b>		
Kindergarten	43.1 (38.7 – 47.5)	40.8 (37.0 – 44.6)
Third grade	57.6 (54.2 – 61.0)	<b>50.2 (46.1 – 54.2)*</b>
Both grades	49.7 (45.9 – 53.6)	45.3 (41.9 – 48.8)
<b>Percentage with Untreated Decay</b>		
Kindergarten	19.7 (16.8 – 22.5)	21.9 (18.7 – 25.0)
Third grade	21.3 (18.8 – 23.8)	23.1 (20.1 – 26.1)
Both grades	20.4 (18.0 – 22.8)	22.5 (19.8 – 25.1)
<b>Percentage Needing Urgent Dental Care</b>		
Kindergarten	5.1 (3.7 – 6.6)	3.3 (2.3 – 4.4)
Third grade	5.6 (4.1 – 7.1)	3.3 (2.0 – 4.5)
Both grades	5.3 (4.0 – 6.7)	<b>3.3 (2.5 – 4.1)*</b>
<b>Percentage with Dental Sealants</b>		
Third grade	29.0 (25.7 – 32.4)	<b>9.8 (7.5 – 12.1)*</b>

\*Significantly different than 2011-2013

Figure 3: Trends over time – percentage of Alabama’s kindergarten and third grade children with decay experience by race – 2011-2013 vs. 2020-2022



Appendix 1: Number of Kindergarten and Third Grade Children Screened by School

School Name	District Name	County	Kindergarten	Third	Total
Albertville Elementary	Albertville City	Marshall	0	328	328
Anna F Booth Elementary	Mobile County	Mobile	52	36	88
Ariton School	Dale County	Dale	44	41	85
Big Spring Lake Kindergarten	Albertville City	Marshall	346	0	346
Blountsville Elementary	Blount County	Blount	58	69	127
Brewton Elementary	Brewton City	Escambia	79	67	146
Brookwood Elementary	Tuscaloosa County	Tuscaloosa	61	55	116
Central Elementary	Coosa County	Coosa	48	28	76
Central School	Madison County	Madison	47	40	87
Chatom Elementary	Washington County	Washington	43	36	79
Choctaw County Elementary	Choctaw County	Choctaw	12	13	25
Davis Elementary	Montgomery County	Montgomery	64	56	120
Dawes Intermediate	Mobile County	Mobile	0	152	152
Elizabeth Fonde Elementary	Mobile County	Mobile	97	0	97
Garrett Elementary	Montgomery County	Montgomery	63	70	133
George W. Carver Elementary	Macon County	Macon	36	37	73
Graham Elementary	Talladega City	Talladega	15	15	30
Green Valley Elementary	Hoover City	Jefferson	45	43	88
Gulf Shores Elementary	Baldwin County	Baldwin	118	101	219
Harlan Elementary	Florence City	Lauderdale	54	39	93
Hatton Elementary	Colbert County	Colbert	23	13	36
Headland Elementary	Henry County	Henry	89	84	173
Heritage Elementary	Madison City	Madison	25	9	34
Hillview Elementary	Jefferson County	Jefferson	15	11	26
Holly Pond Elementary	Cullman County	Cullman	40	32	72
Hutchens Elementary	Mobile County	Mobile	140	0	140
Jemison Elementary	Chilton County	Chilton	114	104	218
Kelly Springs Elementary	Dothan City	Houston	63	60	123
Lincoln Elementary	Talladega County	Talladega	92	85	177
Linden Elementary	Linden City	Marengo	23	15	38
MacMillan International at McKee	Montgomery County	Montgomery	13	8	21
Margaret Elementary	St Clair County	St. Clair	80	63	143
Maryvale Elementary	Mobile County	Mobile	51	55	106
Oak Mountain Elementary	Shelby County	Shelby	138	90	228
Oak Park Elementary	Decatur City	Morgan	42	24	66
Oliver Elementary	Russell County	Russell	42	27	69
Oneonta Elementary	Oneonta City	Blount	79	66	145
Paine Elementary	Trussville City	Jefferson	41	39	80
Pike County Elementary	Pike County	Pike	36	50	86
Robert E. Lee Elementary	Satsuma City	Mobile	54	77	131
Rocky Ridge Elementary	Hoover City	Jefferson	47	55	102

School Name	District Name	County	Kindergarten	Third	Total
Salem Elementary	Dallas County	Dallas	14	13	27
Southeastern School	Blount County	Blount	47	52	99
Southern Choctaw Elementary	Choctaw County	Choctaw	33	31	64
Sugar Creek Elementary	Limestone County	Limestone	68	59	127
Sulligent School	Lamar County	Lamar	43	42	85
Vance Elementary	Tuscaloosa County	Tuscaloosa	50	48	98
Vaughn Road Elementary	Montgomery County	Montgomery	56	59	115
Verbena High School	Chilton County	Chilton	14	29	43
Weatherly Heights Elementary	Huntsville City	Madison	23	15	38
Wedowee Elementary	Randolph County	Randolph	44	45	89
Westwood Elementary	Tuscaloosa County	Tuscaloosa	36	21	57

Appendix 2: Oral Health Status by School

School Name	% With Decay Experience	% With Untreated Decay	% With Dental Sealants (3 <sup>rd</sup> Grade Only)
Albertville Elementary	47.9%	27.1%	7.0%
Anna F Booth Elementary	64.8%	37.5%	2.8%
Ariton School	37.6%	21.2%	12.2%
Big Spring Lake Kindergarten	40.5%	19.9%	--
Blountsville Elementary	60.6%	33.9%	13.0%
Brewton Elementary	27.4%	18.5%	9.0%
Brookwood Elementary	55.2%	24.1%	16.4%
Central Elementary	42.1%	15.8%	14.3%
Central School	35.6%	16.1%	20.0%
Chatom Elementary	49.4%	25.3%	11.1%
Choctaw County Elementary	44.0%	36.0%	7.7%
Davis Elementary	50.4%	40.3%	0.0%
Dawes Intermediate	42.8%	16.4%	12.5%
Elizabeth Fonde Elementary	55.7%	35.1%	--
Garrett Elementary	38.3%	18.0%	1.4%
George W. Carver Elementary	41.1%	28.8%	5.4%
Graham Elementary	40.0%	23.3%	0.0%
Green Valley Elementary	35.2%	15.9%	16.3%
Gulf Shores Elementary	37.4%	23.3%	9.9%
Harlan Elementary	41.9%	8.6%	15.4%
Hatton Elementary	50.0%	36.1%	23.1%
Headland Elementary	34.1%	15.0%	13.1%
Heritage Elementary	23.5%	8.8%	0.0%
Hillview Elementary	46.2%	15.4%	0.0%
Holly Pond Elementary	43.1%	18.1%	12.5%
Hutchens Elementary	32.9%	18.6%	--
Jemison Elementary	59.2%	25.2%	22.1%
Kelly Springs Elementary	47.2%	27.6%	6.7%
Lincoln Elementary	48.0%	22.0%	0.0%
Linden Elementary	52.6%	31.6%	0.0%
MacMillan International at McKee	23.8%	4.8%	12.5%
Margaret Elementary	49.0%	17.5%	25.4%
Maryvale Elementary	67.0%	27.4%	12.7%
Oak Mountain Elementary	19.4%	9.3%	24.7%
Oak Park Elementary	59.1%	36.4%	0.0%
Oliver Elementary	34.8%	13.0%	0.0%
Oneonta Elementary	52.4%	16.6%	27.3%
Paine Elementary	33.8%	8.8%	18.0%
Pike County Elementary	46.5%	14.0%	0.0%
Robert E. Lee Elementary	29.8%	6.1%	26.0%
Rocky Ridge Elementary	27.5%	4.9%	7.3%

School Name	% With Decay Experience	% With Untreated Decay	% With Dental Sealants (3 <sup>rd</sup> Grade Only)
Salem Elementary	63.0%	40.7%	15.4%
Southeastern School	59.6%	28.3%	11.5%
Southern Choctaw Elementary	59.4%	34.4%	0.0%
Sugar Creek Elementary	40.9%	22.8%	5.1%
Sulligent School	61.2%	29.4%	16.7%
Vance Elementary	44.9%	28.6%	6.3%
Vaughn Road Elementary	45.2%	21.7%	1.7%
Verbena High School	60.5%	37.2%	0.0%
Weatherly Heights Elementary	18.4%	7.9%	6.7%
Wedowee Elementary	42.7%	19.1%	2.2%
Westwood Elementary	38.6%	19.3%	4.8%