Child Health Advisory Committee
Minutes
March 13, 2025, · 9:00 a.m. – 10:00 a.m. · Zoom

Call to order: 9:00 a.m.

Zoom Meeting

Present: Ashten Black, Shannon Borchert, Patrick Casey, Jerri Clark, Carole Garner, Teresa Henson (member elect) Cheria McDonald, Jennifer Morrow, Dave Oberembt, Carmel Perry, Elaine Prewitt, Camille Richoux, Ray Samaniego, Bala Simon, Jennifer Wessel, Tammie Works **Absent:** Lucas Harder, Nathan Morris, Chad Sanders (member elect)

Staff: Shanetta Agnew, Shy Whitley-Smith

Guests: Amy Davidson, Taylor James, Dr. Labuda, Toni Lazic, Lisa Mundy, Ariel Rogers, Tommie Rogers

Review of January minutes: J. Morrow moved to accept the minutes, R. Samaniego seconded. Motion passed.

Review of February minutes: S. Borchert moved to accept the minutes, B. Simon seconded. Motion passed.

Act 1220 & Coordinated School Health Reports: S. Borchert moved to accept the reports, B. Simon seconded. Motion passed.

State School Health and Wellness (Act 1220) Coordinator Report (Shanetta Agnew & Shy Whitley):

Act 1220 Coordinator Report (Shanetta Agnew & Shy Whitley):
Shanetta A. attended the Little Rock School District wellness committee meeting on February 7, 2025. The committee is currently reviewing and comparing their wellness policy in comparison to the Arkansas School Board Association wellness policy & DESE nutrition and physical activity standards and body mass index for age assessment protocols.

Shanetta A. & Ariel R. (CSH) attended the North Little Rock School District wellness committee meeting held February 12, 2025.

The meeting objectives included:
●To engage school wellness chairs in meaningful dialogue about the Whole School, Whole Community, Whole Child (WSCC) model and our roles for the 2024-2025 School Year.
●To provide an update on Child Nutrition and review school menus
●To review and analyze the current NLRSD Wellness Policy.

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Coordinated School Health Advisor Report (Lisa Mundy & Ariel Rogers):
The third quarterly Coordinated School Health meeting was held virtually on Wednesday, February 12, 2025. 176 school district staff were in attendance.

Lisa M. attended the blind and deaf school wellness committee meeting they have combined into one, as the two schools will be under one LEA number. Brian Tanner is the new chair for the committee.

New Business:
Jennifer W., ACHI presented the Assessment of Childhood and Adolescent Obesity in Arkansas: 21st edition

BMI ASSESSMENT

- Act 1220 of 2003, as amended by Act 201 of 2007, requires schools to collect height and weight
- Applies to kindergarten through even-numbered grades, exempting 12th grade
- Parents have the option opt out

BMI CALCULATION AND CATEGORIZATION

- BMI Formula: (Weight in pounds ÷ (Height in inches²)) x 703
- BMI values are relative to other children of the same sex and age
- Categorizations:
  - Underweight: <5th percentile
  - Healthy weight: 5th to <85th percentile
  - Overweight: 85th to <95th percentile
  - Obese: ≥95th percentile
- New section discussing severe obesity: ≥ 120% of the 95th percentile

Jennifer W. mentioned "Severe obesity" is a new section in the report and was not included in the presentation, but is available online, CDC added this, because kids are falling into that weight category. (Graph is inserted below)

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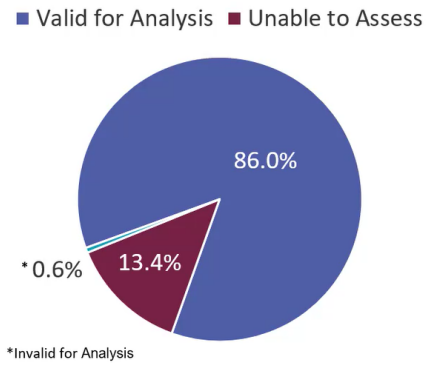
REASONS STUDENTS' BMI COULD NOT BE ASSESSED

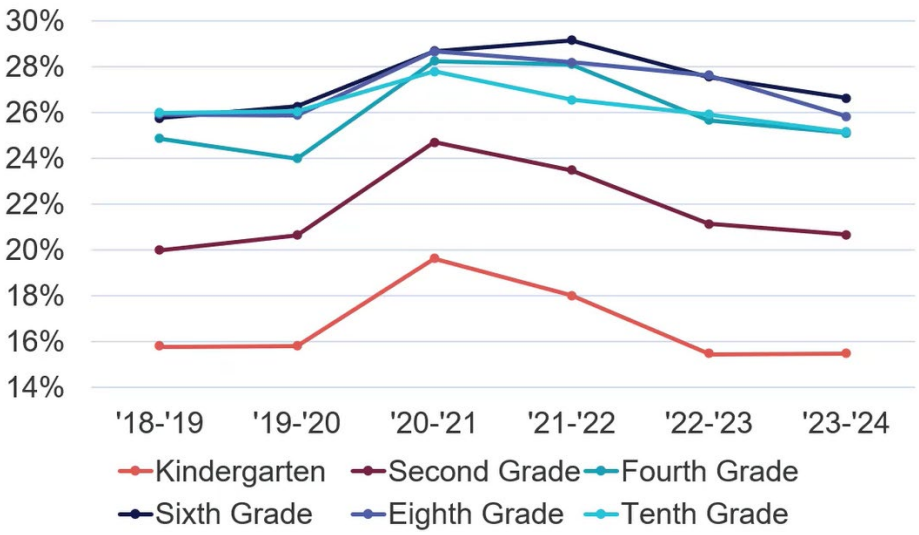


Breakdown of Known 'Unable to Assess' Reasons		
Absent	12,305	46.5%
Parent Refused	9,558	36.1%
Student Refused	2,521	9.5%
Other	1,737	6.6%
Physical Disability	285	1.1%
Weight Exceeded Scale	34	0.1%
Inaccurate Measurements	20	0.1%
Pregnant	18	0.1%

Reasons Students' BMI Could Not Be Assessed

To complete the BMI assessments, school staff collected each student's height and weight measurements. Fourteen percent of students with records submitted (27,478 out of 197,249) either had data that was classified as "unable to assess" (see Table 1 for a breakdown of reasons) or did not have valid data for height, weight, or both.

Percentage of Arkansas Public School Students with a BMI Classification of Obese



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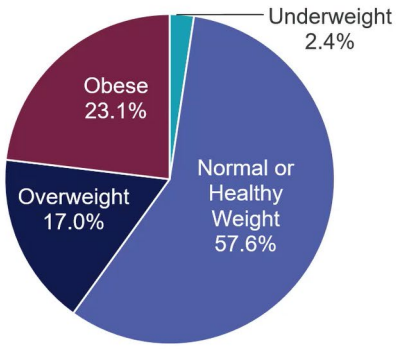
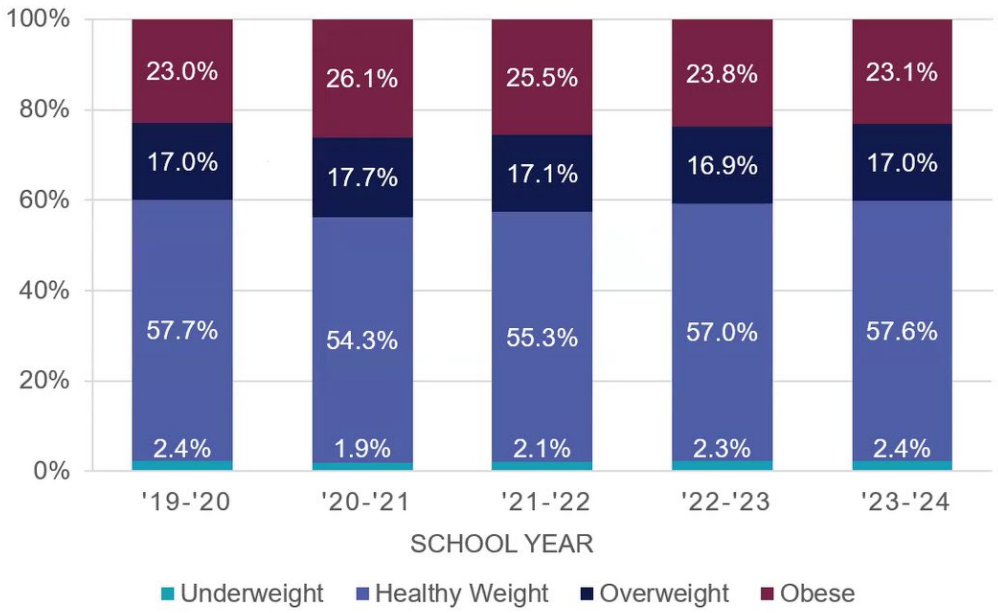
STUDENT BMI CLASSIFICATION FOR ARKANSAS PUBLIC SCHOOL STUDENTS



Trends in BMI Classifications for Arkansas Public School Students



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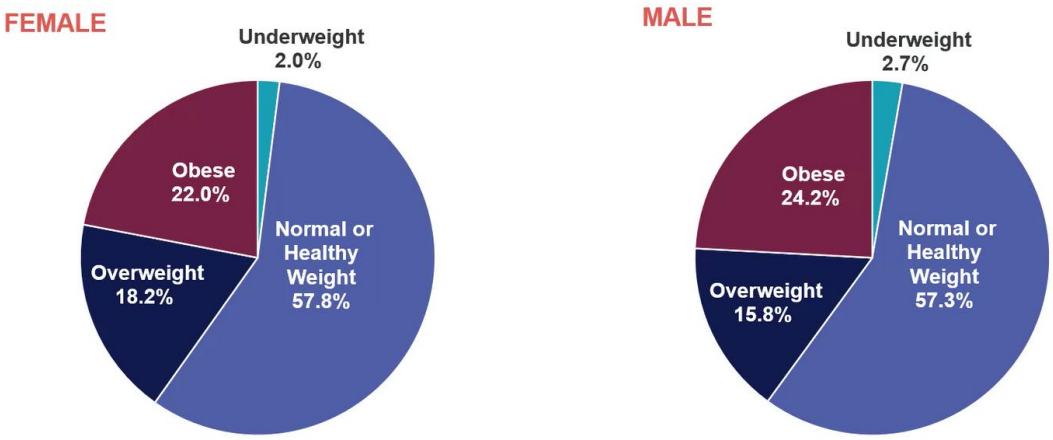
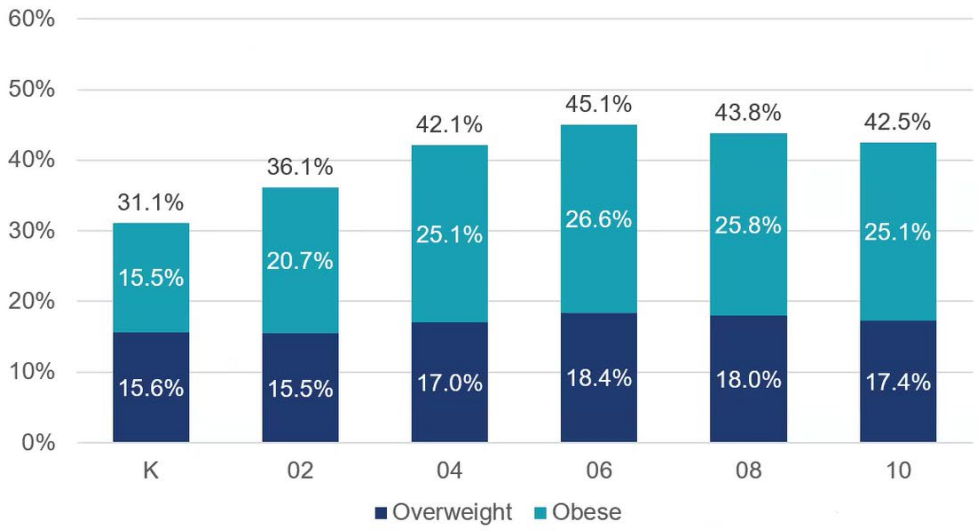
STUDENT BMI CLASSIFICATION BY GENDER



PERCENTAGE OF STUDENTS WITH BMI MEASUREMENTS CLASSIFIED AS OVERWEIGHT OR OBESE BY GRADE



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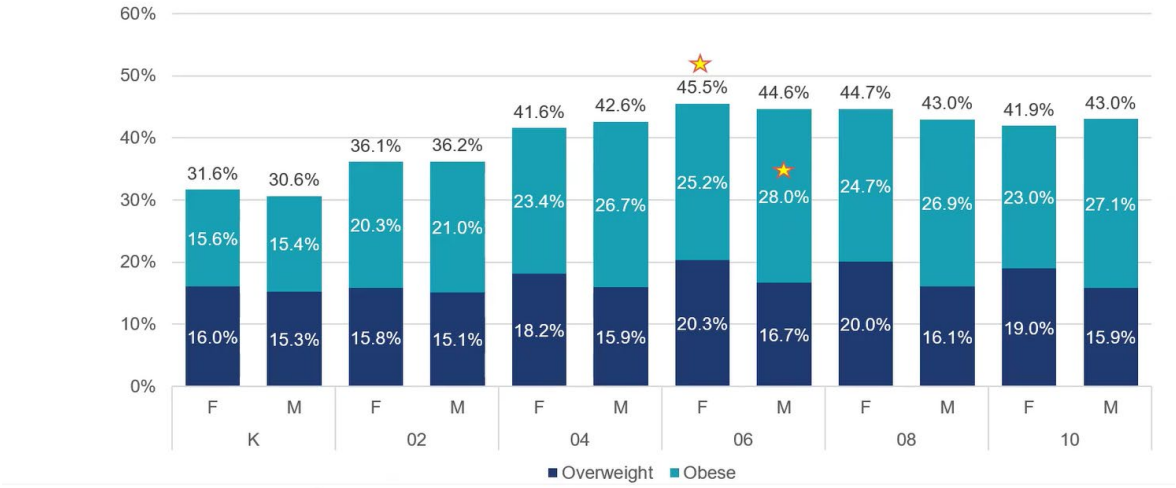
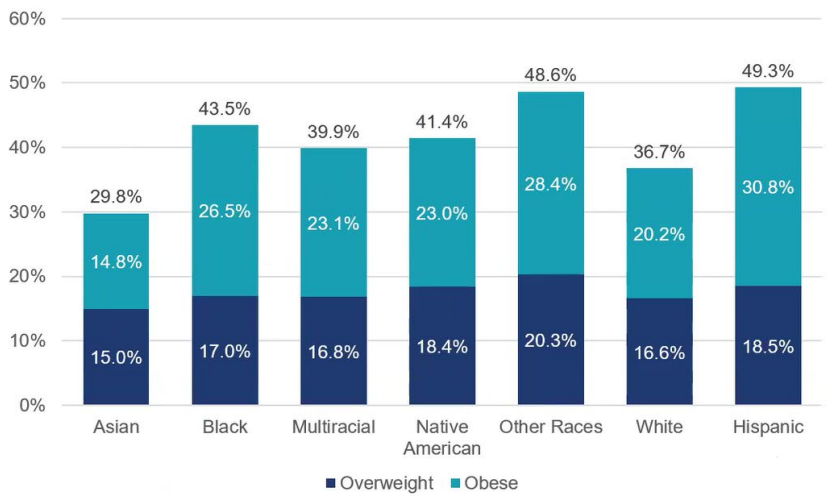
PERCENTAGE OF STUDENTS WITH BMI MEASUREMENTS CLASSIFIED AS OVERWEIGHT OR OBESE BY GRADE AND GENDER



PERCENTAGE OF STUDENTS WITH A BMI MEASUREMENT CLASSIFIED AS OVERWEIGHT OR OBESE BY RACE/ETHNICITY



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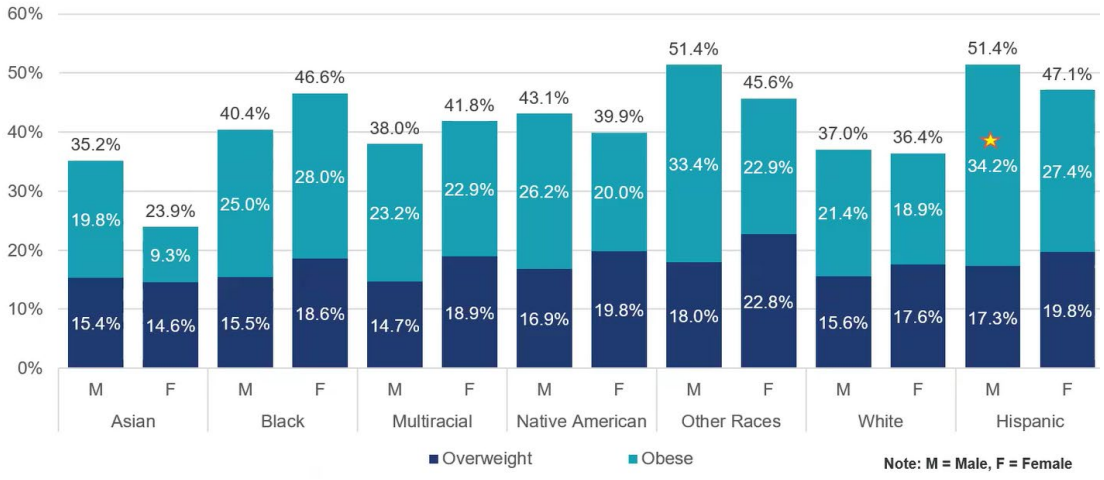
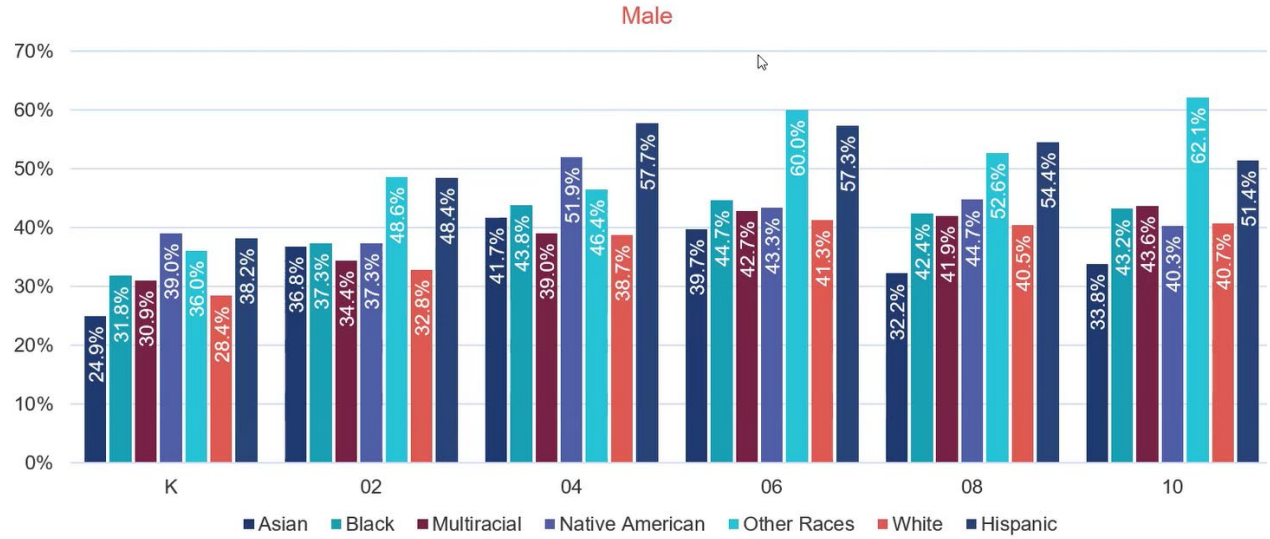
PERCENTAGE OF STUDENT BMI MEASUREMENTS CLASSIFIED AS OVERWEIGHT OR OBESE BY RACE/ETHNICITY AND GENDER



PERCENTAGE OF STUDENTS WITH BMI MEASUREMENTS CLASSIFIED AS OVERWEIGHT OR OBESE BY GENDER, RACE/ETHNICITY, AND GRADE



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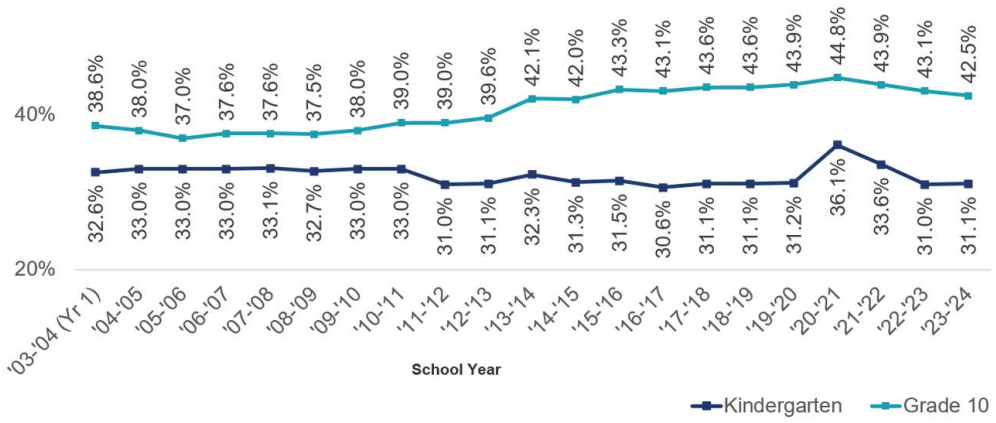
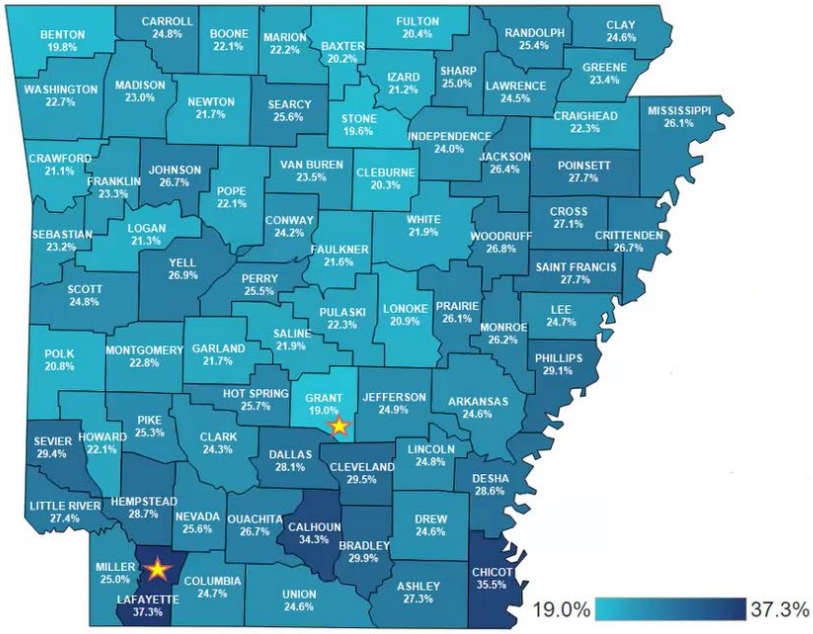


PERCENTAGE OF STUDENTS CLASSIFIED AS OBESE, BY COUNTY LOCATION OF SCHOOL



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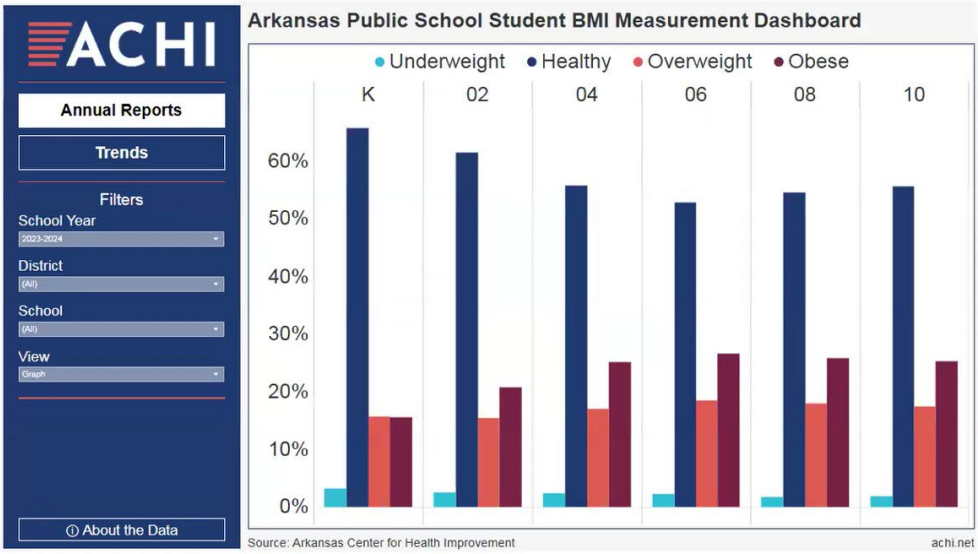
ARKANSAS PUBLIC SCHOOL STUDENT BMI MEASUREMENT DASHBOARD



Dashboard data can be reviewed by the following:

- School year
- Trends
- District
- School

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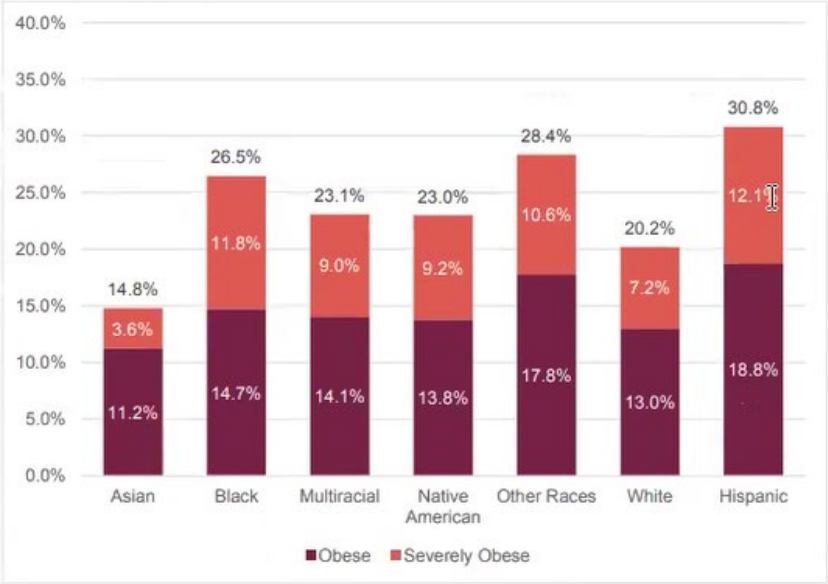
Additional data regarding the new “severe obesity data”

FIGURE 14. PERCENTAGE OF STUDENTS WITH BMI MEASUREMENTS CLASSIFIED AS OBESE OR SEVERELY OBESE BY RACE/ETHNICITY, SCHOOL YEAR 2023-2024



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Severely Obese: *BMI-for-age-and-gender greater than or equal to 120% of the 95th percentile.*

Obese: *BMI-for-age-and-gender greater than or equal to 95th percentile and less than 120% of the 95th percentile.*

Overweight: *BMI-for-age-and-gender greater than or equal to the 85th and less than the 95th percentile.*

Healthy Weight: *BMI-for-age-and-gender greater than or equal to the 5th and less than the 85th percentile.*

Underweight: *BMI-for-age-and-gender less than the 5th percentile.*

BMI Classifications for All Students

Figure 13 is identical to Figure 3 except that the obesity classification is divided here to show those who meet the threshold for severe obesity.

In the 2023-2024 school year, 23.1% of Arkansas students had BMI measurements that were classified as obese or severely obese, and over a third of these students met the threshold for the severe obesity category. This equates to almost 9% of students measured being classified as severely obese, which is about two percentage points higher than for students nationwide.[17]

FIGURE 13. STUDENT BMI CLASSIFICATION FOR ARKANSAS PUBLIC SCHOOL STUDENTS, ALL BMI CATEGORIES, SCHOOL YEAR 2023-2024

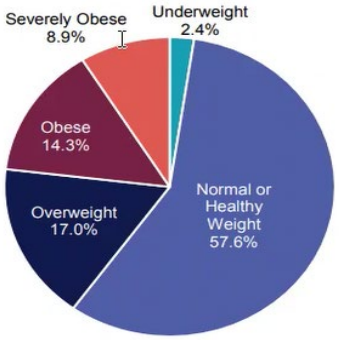
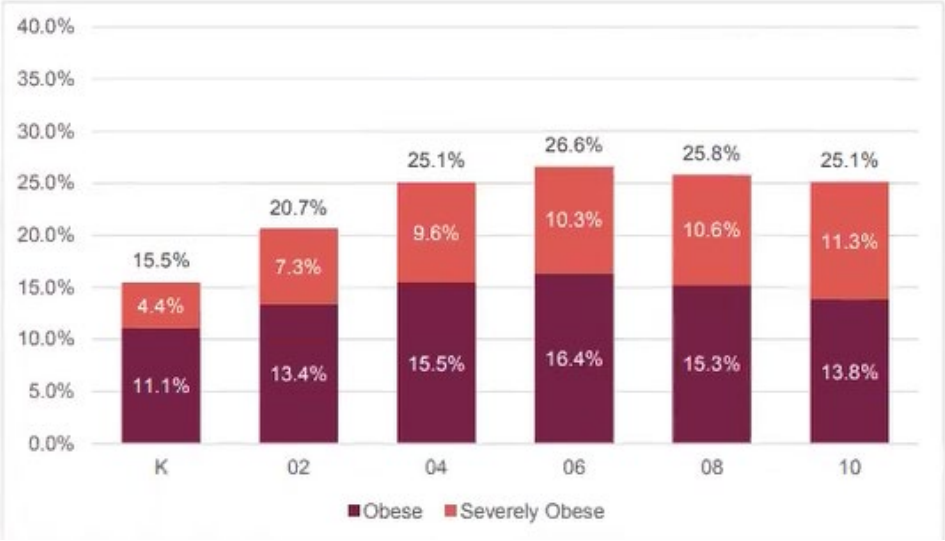


FIGURE 15. PERCENTAGE OF STUDENTS WITH BMI MEASUREMENTS CLASSIFIED AS OBESE OR SEVERELY OBESE BY GRADE, SCHOOL YEAR 2023-2024



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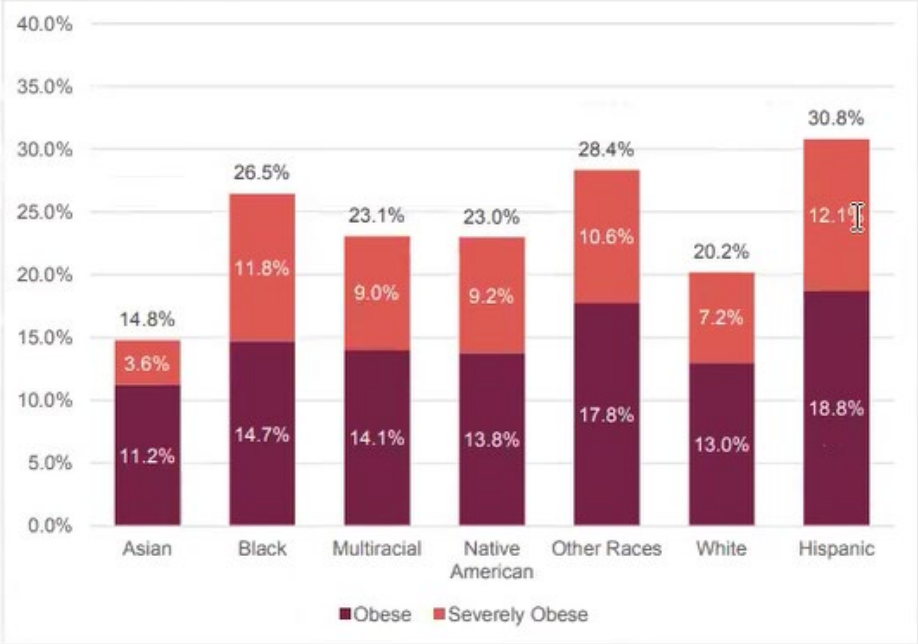

Lisa M. inquired if a specific set of students could be tracked/assessed K-10th. Example every 2 years per grade. Jennifer W. will check with the ACHI analytical team for data.

Toni Lazic Post-Doctoral Fellow, ACHI presented on "15 to 30 the cost of adolescent obesity: a longitudinal cohort study"

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Basic Information

- Research Question- Is there an association between an adolescent's weight status in 10th grade and the adolescent's healthcare expenditures at 30 years old?

- Hypothesis – Adolescents that had obesity or severe obesity will have significantly higher healthcare expenditures in early adulthood than adolescents that had a healthy weight status.

Why study this?

- What was known.
  - Adolescent obesity results in higher costs later in life
- What is new about our study?
  - Our estimates are directly tied to participants
  - We have an additional category of severe obesity for comparison
  - We break down if the primary driver of the cost is due to more people participating in healthcare or due to higher spending among those who did participate in healthcare.

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Population

- 10th graders who had a valid BMI
- 14 or older (typically 15 at this age)
- Not missing information on race, weight, sex, or other variables we controlled for.
- Has at least 1 year of continuous enrollment between 2016-2023

Data Sources

- BMI panel- BMI measurement and demographic information
- APCD- expenses
- AHRQ – access control

Outcomes- Average difference annually at 30

- Total Expenses- Total Medical and pharmacy
- Total Medical- all medical expenses (without pharmacy)
- Outpatient
- Inpatient
- Emergency Department
- Pharmacy

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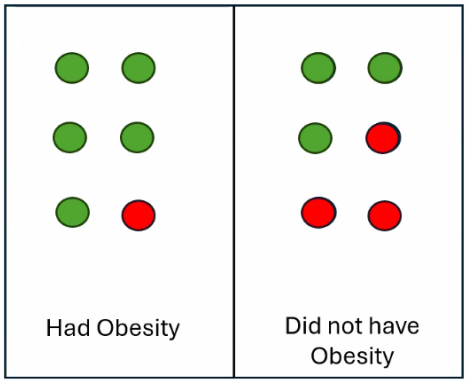
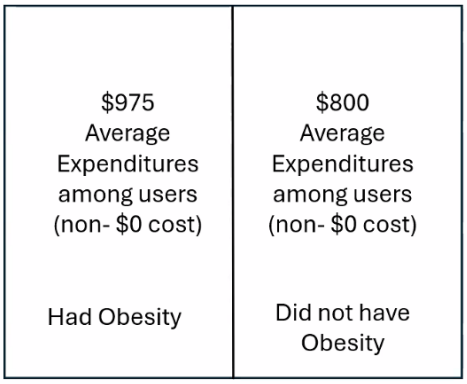
Extensive Margin vs Intensive Margin

Extensive Difference
(Number of people using a resource)



Green= Had an outpatient visit
Red= Did not have an outpatient visit

Intensive Difference
(Quantity of resource used by each person)



Unadjusted differences

- When comparing adolescent weight status our population significantly differs for every variable
- These statistical test do not make pairwise comparisons but visually you can start to see patterns

Variable	Healthy (n=18,366)	Overweight (n=4,174)	Obesity (n=5,631)	Severe Obesity (n=2,993)	X^2 or ANOVA
Demographics					
Race/Ethnicity					
White	77.7%	73.4%	74.1%	67.9%	0.001
Black	17.6%	21.2%	20.7%	27.8%	
Hispanic	3.2%	4.2%	3.9%	3.5%	
Other	1.5%	1.2%	1.3%	0.9%	
Sex					
Female	60.0%	61.0%	51.0%	50.0%	0.001
Male	40.0%	39.0%	49.0%	50.0%	
Insurance					
Commercial	48.9%	44.5%	43.2%	36.2%	0.001
Medicaid	51.1%	55.5%	56.8%	63.8%	
RUCA					
Metropolitan	61.7%	58.1%	57.1%	54.7%	0.001
Urban	34.2%	37.4%	38.3%	40.1%	
Rural	4.2%	4.5%	4.6%	5.2%	
Poverty					
Yes	34.6%	36.4%%	37.0%	42.2%	0.001
No	65.5%	63.6%	63.0%	57.8%	
Year most expenses incurred					
2017	3.0%	3.0%	3.4%	3.6%	0.014
2018	15.0%	15.7%	15.1%	15.5%	
2019	19.1%	17.2%	18.2%	18.7%	
2020	20.3%	19.5%	20.7%	20.1%	
2021	20.7%	21.1%	21.5%	20.9%	
2022	18.8%	20.0%	17.4%	17.9%	
2023	3.1%	3.5%	3.7%	3.3%	
Access					
Health Professional Shortage Area					
None	21.9%	22.1%	22.9%	22.9%	0.001
Whole	5.7%	6.2%	6.7%	7.6%	
Some	72.4%	71.7%	70.4%	69.4%	
Number of Hospitals (per 1000)	0.034	0.034	0.034	0.036	0.001
Number of MDs (per 1000)	2.15	2.10	2.01	2.01	0.001

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Percent of Individuals who had at least some expenses for each outcome (unadjusted)

Expense type	Healthy	Overweight	Obesity	Severe Obesity	X^2
Total expenses (medical and pharmacy)	85.7%	86.8%	85.3%	86.1%	0.112
Total expenses medical only	81.9%	82.8%	82.0%	83.1%	0.199
Total outpatient	80.8%	81.5%	81.0%	81.9%	0.365
Total pharmacy	72.0%	73.8%	71.6%	73.5%	0.017
Total emergency department	20.4%	23.9%	24.0%	27.3%	0.000
Total inpatient	9.1%	8.9%	8.3%	8.7%	0.428

- Given many outcomes have more than 25% of the population with no expenses, we will use a two-part model
- Only pharmacy and emergency department are showing a difference among weight categories

Adjusted Means or probability of having an expense at each outcome all else equal

Expense type	Healthy	Overweight	Obesity	Severe Obesity
Total expenses (medical and pharmacy)	86.6%	87.7%	87.5%	88.7%
Total expenses medical only	82.8%	83.8%	84.5%	86.0%
Total outpatient	81.6%	82.5%	83.5%	84.9%
Total pharmacy	73.3%	75.3%	75.1%	78.0%
Total emergency department	19.2%	21.7%	22.0%	23.5%
Total inpatient	7.8%	7.4%	7.5%	7.8%

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3 Models

- Two part- takes into account both the probability of having an expense and the difference in expense among those who used at least some healthcare
  - Estimate expressed in $
- Logistic regression- estimates the probability of having at least some expense
  - Expressed as a percentage point difference (5% vs 4% = 1 PP)
- GLM- estimates the cost difference among only those who had at least some cost for each outcome
  - Estimate expressed in $

Main Results

	Two Part Model			Extensive			Intensive		
	coef	95%CI	p	coef	95%CI	p	coef	95%CI	p
Total Expenses									
Overweight	191	(-82,462)	0.171	0.01	(0.00,0.02)	**0.022**	156	(-155,467)	0.326
Obesity	540	(208,871)	**0.001**	0.01	(-0.01,0.02)	0.113	577	(198,956)	**0.003**
Severe Obesity	874	(467,1280)	**0.001**	0.02	(0.01,0.03)	**0.001**	883	(423,1343)	**0.001**
Total Expenses Medical									
Overweight	104	(-102,311)	0.321	0.01	(-0.01,0.02)	0.097	84	(-162,330)	0.502
Obesity	414	(162,667)	**0.001**	0.02	(0.01,0.03)	**0.008**	426	(127,725)	**0.005**
Severe Obesity	669	(360,978)	**0.001**	0.03	(0.02,0.05)	**0.001**	652	(291,1012)	**0.000**
Emergency Department									
Overweight	15	(7,23)	**0.001**	0.02	(0.01,0.04)	**0.001**	21	(-8,51)	0.152
Obesity	26	(16,36)	**0.001**	0.03	(0.01,0.04)	**0.001**	62	(26,97)	**0.001**
Severe Obesity	25	(14,37)	**0.001**	0.04	(0.03,0.06)	**0.001**	32	(-5,68)	0.086
Inpatient									
Overweight	-20	(-117,76)	0.679	-0.01	(-0.01,0.01)	0.312	229	(-404,863)	0.479
Obesity	-53	(-161,56)	0.344	-0.01	(-0.01,0.01)	0.468	-217	(-927,493)	0.549
Severe Obesity	159	(8,310)	**0.039**	0.01	(-0.01,0.01)	0.962	1715	(761,2669)	**0.001**
Outpatient									
Overweight	83	(-15,182)	0.099	0.01	(-0.01,0.02)	0.153	81	(-37,199)	0.178
Obesity	249	(129,369)	**0.000**	0.02	(0.01,0.03)	**0.003**	257	(113,400)	**0.001**
Severe Obesity	387	(240,533)	**0.001**	0.03	(0.02,0.05)	**0.001**	383	(210,556)	**0.001**
Pharmacy									
Overweight	83	(11,156)	**0.024**	0.02	(0.01,0.03)	**0.003**	87	(-10,185)	0.080
Obesity	84	(1,167)	**0.048**	0.02	(0.01,0.03)	**0.012**	91	(-21,203)	0.114
Severe Obesity	222	(111,334)	**0.001**	0.05	(0.03,0.06)	**0.001**	233	(88,379)	**0.002**

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Results some highlights- Significant higher expenses at the age of 30

- Total expenses-
  - Obesity ($540)
  - Severe obesity ($874) than those who had a healthy weight in adolescents
- Emergency Department
  - Overweight $15
  - Obesity $26
  - Severe Obesity $25
- Inpatient
  - Severe obesity $159

Results some highlights- Significant higher expenses at the age of 30

- Total medical-
  - Obesity ($414)
  - Severe obesity ($669) than those who had a healthy weight in adolescents
- Outpatient
  - Obesity $249
  - Severe obesity $387
- Pharmacy
  - Overweight $83
  - Obesity $84
  - Severe obesity $222

What is driving the cost difference?

- Emergency Department
  - Primarily because more people who had a heavier weight in 10th grade visit the ER at 30 than those who had a healthy weight in 10th grade (extensive)
- Inpatient
  - Among those who had some inpatient expenses those who had severe obesity (in 10th grade) on average had $1,715 higher expenses (intensive)
- Total Medical and Outpatient
  - Both (extensive and intensive) more people have at least some outpatient exposure and when they do have outpatient services, the services are typically more expensive compared to someone who had a healthy weight in 10 grade

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Total expenses medical only	82.8%	83.8%	84.5%	86.0%
Total outpatient	81.6%	82.5%	83.5%	84.9%
Total pharmacy	73.3%	75.3%	75.1%	78.0%
Total emergency department	19.2%	21.7%	22.0%	23.5%
Total inpatient	7.8%	7.4%	7.5%	7.8%

$1,715 Higher for Severe Obesity

The procedures for the driven cost have not been studied at the present moment.

Final thoughts/Perspective

- The heavier the weight status in 10th grade the higher healthcare expenses later on in life (at age of 30).
- Depending on the healthcare service the cost difference between weight categories may primarily be driven by a higher proportion of people using a service (such as ED) or due to higher expenses among those who use the service (IP)

Perspective

- If adolescent obesity and severe obesity levels were to return to levels in the 1970s, by the time a single cohort of 10th graders reached the age of 30, the country would save at least $464,507,472 annually (per cohort).

Old Business:

S. Borchert moved to approve the Maximum Portion Size List 2025-2026 T. Works seconded. Motion passed.

Child Health Advisory Committee
Minutes
March 13, 2025, · 9:00 a.m. – 10:00 a.m. · Zoom

Member & Non-Member Updates/Announcements:

- HB1094 and HB1512 were discussed with the committee and shared via chat box with the group.
- The Arkansas Association for Supervision and Curriculum Development is changing its name to Arkansas Teaching Leading and Learning Collaborative (AR TLL). The change is effective in July.
- The amended FY24 Legislative CHAC Report will be shared with the committee.

Join Zoom Meeting:

https://us02web.zoom.us/j/83582295337?pwd=Uk1JZGxSUndqYS9YeTF4TXNHdXJVQT09

Meeting ID: 835 8229 5337 Passcode: 229369
One tap mobile: +1 646 931 3860 US, +1 301 715 8592 US (Washington DC)

Next Meeting: Thursday April 10, 2025, from 9:00 am – 10:00 am.

State Board of Education are held monthly on the 2nd Thursday and Friday of each month.
April 10-11, 2025, 9:00 am
May 8-9, 2025, 9:00 am
June 12-13, 9:00 am

State Board of Health meetings are held quarterly on the 4th Thursday of each month.
April 24, 2025, at 10:00 am
October 23, 2025, at 10:00 am