

Health Status and Health Care Access of Ohio's Youth

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Executive Summary



Mental health, obesity, and dental health are among the most common and consequential concerns experienced by Ohio youth. This chartbook describes their prevalence among different groups of Ohio youth, as well as how well youth can access care.

Key Findings*:

1. Mental health impairment has increased among youth 12-18 years old since 2019. The prevalence of needing treatment or counseling for an emotional, developmental, or behavioral problem is especially high for females 12-18 years old (25.0%).
2. During the past decade, the overall prevalence of youth obesity has been relatively stable. Since 2019, however, analyses found some evidence of declining prevalence among males 6-11 years old.
3. Even though Medicaid serves a higher-risk population of youth, the prevalence of unmet mental health care needs was similar to youth with employer-sponsored insurance. Medicaid youth, however, did have higher rates of unmet dental health care needs. The most common reason for unmet (mental and dental) health care needs was that the provider would not accept the youth's insurance.

**Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.*

Visit grc.osu.edu/OMAS for additional information about OMAS, including public use files, codebooks, and methods

Contents

Background	Page 5	Summary of Results	Page 31
Objectives	Page 7	References	Page 32
Methods	Page 8	Acknowledgements	Page 34
Results			
Prevalence Estimates	Page 12		
Mental Health	Page 15		
Obesity	Page 18		
Dental Health	Page 21		
Access to Health Care	Page 22		
Unmet Medical Needs	Page 26		

Background



The mental and physical health of children and adolescents is a critical concern for state policymakers, affecting the current and future wellbeing of Ohio communities. Risk factors for poor health in later life may emerge early in the life course, so addressing children's and adolescents' wellbeing can have profound and wide-ranging impact in adulthood.^{1,2} The unique developmental demands of childhood and adolescence render youth particularly susceptible to influences from the social environment, such as their family, peers, and community.³

Mental health concerns are common among children in the United States, with the most commonly diagnosed disorders being Attention Deficit Hyperactivity Disorder (ADHD; 9.8% of all US children), anxiety (9.4%), behavior problems (8.9%), and depression (4.4%).⁴ The National Survey of Children's Health observed significant increases in the prevalence of all these disorders from 2016-2020⁵ and as of 2021, 18.9% of children 5-17 years old had received some kind of mental health treatment in the past 12 months.⁶ Analyses from the National Survey of Children with Special Health Care Needs found that children with emotional, developmental, or behavioral problems were more likely than other youth to have unmet mental healthcare needs.⁷ However, having private or public insurance greatly reduced the likelihood of having unmet needs. Improving access to mental health services will continue to be central to serving Ohio's youth.

Background, continued

Children's dental health has significant medical and financial consequences that may be less appreciated because of dentistry's separation from medicine. Nonetheless, dental health problems are quite common. Nearly half (46%) of U.S. children 2-to-19 years old have dental caries (untreated or restored),⁸ and data from the National Health and Nutrition Examination Survey indicated that the prevalence of early childhood caries increased from 2013-14 to 2017-18, especially for males and children from lower income households.⁹ Preventive oral care has demonstrated effectiveness in reducing the likelihood of dental caries and other problems,¹⁰ and research has shown that children with public health insurance are much more likely than uninsured children to receive preventive dental care.¹¹

Finally, obesity continues to represent a major concern for the health of American children. According to the best available national estimates, about one in five (20.7%) 6- to 11-year-olds and 22.2% of 12- to 19-year-olds are obese.⁸ Overall prevalence soared during earlier decades—tripling from the 1970s through the early 2000s, but then increasing more slowly by 2008.¹² Obesity in children often leads to a range of health issues, including high blood pressure, high cholesterol, type 2 diabetes, breathing concerns such as asthma and sleep apnea, and joint problems. Because children who are obese often have comorbid health problems, they may miss school more frequently and struggle academically.¹³ Effective approaches to treating childhood obesity remain elusive, so efforts to prevent its emergence emphasize identification of young children who are overweight and at high risk for developing obesity.¹⁴ The most promising approaches are multi-faceted, addressing the child's diet and exercise, as well as psychological processes and changing the child's environment.

Objectives



This chartbook documents the prevalence of key mental and physical health conditions among Ohio's youth in 2023, and to assess the extent to which youth can access needed care. Specifically, in this chartbook we seek to:

1. Estimate the prevalence of health conditions relating to mental and emotional health, dental health, and obesity.
2. Assess whether Ohio's youth can access needed health care.
3. Examine how these measures may vary by key youth demographic variables, including youth age, Medicaid enrollment status, race/ethnicity, and county type.

Methods



Data Sources: This chartbook uses data from the 2023 Ohio Medicaid Assessment Survey (OMAS), as well as earlier OMAS survey iterations from 2012 through 2021.

The 2023 OMAS: The OMAS is a repeated cross-sectional random probability survey of non-institutionalized Ohio adults 19 years of age and older and proxy interviews of children 18 years of age and younger. It provides health status and health system-related information about residential Ohioans at the state, regional, and county levels, with a concentration on Ohio's Medicaid, Medicaid-eligible, and non-Medicaid populations. The 2023 OMAS used a combination of an address-based sampling (ABS) frame and a list frame of Medicaid enrollees and collected surveys by phone, web, and paper. The most recent iteration, the 2023 OMAS, was fielded from September 2023 – January 2024. The survey had an overall sample size of 39,626 and an eligibility-adjusted response rate of 24.0%.

Represented Population: The target population for the 2023 OMAS was all residents of Ohio. To ensure estimates are representative of this population, the 2023 OMAS survey weights were adjusted to account for any potential non-response bias. Additionally, poststratification adjustments were made to ensure that the final weights align with population totals from the 2020 5-year American Communities Survey and 2023 Ohio Medicaid enrollment data. See the 2023 methodology report for full details (<https://grc.osu.edu/OMAS/2023Survey>).

Methods, continued

Demographic Information: To see additional demographic information and estimates for the Ohio population represented by the 2023 OMAS, please see the OMAS Series Dashboard at <https://grcapps.osu.edu/app/omas>. This interactive tool provides fast, real-time results for a data-driven view of Ohio's health and healthcare landscape.

Analysis: Descriptive statistics are reported in the figures and tables in the chartbook. No statistical testing was conducted. Estimates from OMAS are reported in this chartbook only when the data are sufficient for calculating and presenting reliable estimates. We define a reliable estimate as one where the size of the unweighted subpopulation of interest is greater than 30 individuals and the coefficient of variation for the estimate is less than 0.3. Estimates with low precision are either hidden from view or are replaced with N/A.

Interpretation: This chartbook is descriptive in nature, and any differences observed between groups should not be used to draw conclusions about underlying causes. The findings presented do not account for important factors that might influence any observed differences (e.g., income, education level, general health status etc.). Therefore, the findings in this chartbook cannot be used to conclude that group differences are due to group membership as there are many factors that may be driving these findings, and this analysis was not designed to be able to control for them.

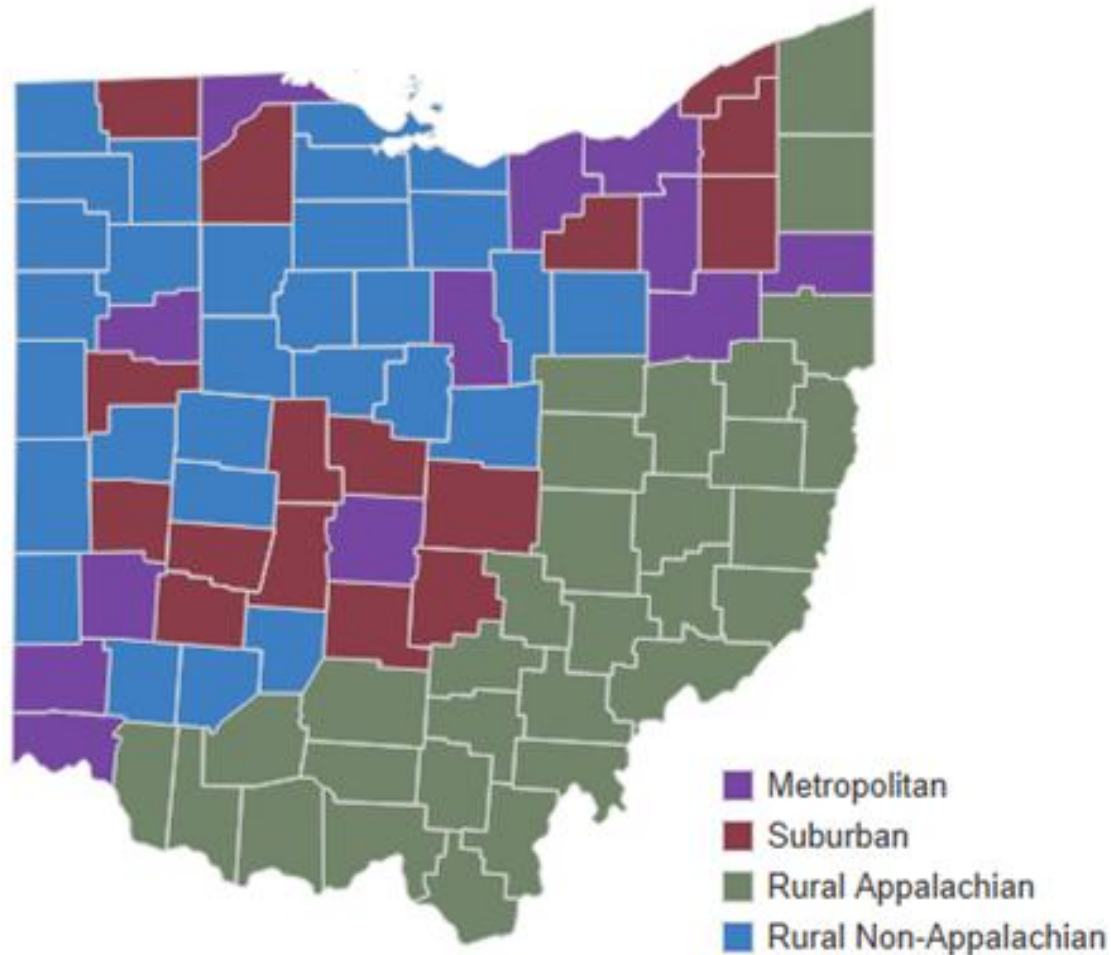
For further details about the 2023 OMAS methodology, questionnaire, and access to the dashboard, please visit <https://grc.osu.edu/OMAS/2023Survey>.

Methods, continued

Variable Definitions

- *Youth*: 18 years old and younger, as identified by OMAS
- *Mental health impairment (MHI)*: For youth aged 6 and older, at least 14 days in the past 30 days where a mental health condition or emotional problem kept the child from participating in school, social relationships with friends, or other usual activities.
- *Emotional, developmental, and behavioral problems*: Measured via a question asking, “does the child have any kind of emotional, developmental or behavioral problem for which they need or get treatment or counseling?”
- *Prescription for ongoing condition*: This is an indicator for currently needing prescription medication due to a condition lasting 12 months or more.
- *Unmet dental/mental health care needs*: Measured via questions asking whether the youth needed dental or mental care in the last 12 months. Respondents who said the youth needed care were asked whether the youth received that care. If the respondent reported the youth needed but did not receive that type of care, then the youth was classified as having an unmet health care need.

OMAS County Types



OMAS assigns counties to one of four mutually exclusive county types – **rural Appalachian, rural non-Appalachian, metropolitan, and suburban**. OMAS defines these county types in accordance with federal definitions, as follows: (1) rural Appalachian is defined using the Appalachian Regional Commission (ARC) standard; (2) metropolitan is defined using US Census Bureau definitions incorporating urban areas and urban cluster parameters; (3) rural non-Appalachian is defined by the Federal Office of Rural Health Policy at the Health Resources and Services Administration (HRSA), excluding Appalachian counties; (4) suburban is defined by the US Census Bureau and is characterized as a mixed-use or predominantly residential area within commuting distance of a city or metropolitan area.

For further details about the OMAS county types, please visit <https://grc.osu.edu/OMAS/2023Survey>.

RESULTS: HEALTH CONDITIONS

The prevalence of health conditions relating to mental health, physical health, and dental health in 2023



Youth mental, physical health conditions were common

Health condition	Ages	%	90% C.I.	
Mental health				
Mental health impairment (14+ days of mental distress during the past 30 days)	6-18	3.9%	3.2%	4.6%
Needed treatment/counseling for emotional, developmental, or behavioral problem	0-18	15.5%	14.4%	16.7%
Physical health				
Obesity	6-18	21.0%	19.4%	22.5%
Needed prescription medication for a condition lasting 12+ months	0-18	19.4%	18.1%	20.7%
Dental health				
Caregiver-rated youth dental health was “fair” or “poor”	0-18	5.9%	5.2%	6.7%

- Nearly one in six Ohio youth (15.5%) needed treatment or counseling for an emotional, developmental, or behavioral problem, and 3.9% of those 6-18 years old experienced mental health impairment. Over one in five of youth 6-18 years old (21.0%) were obese and a similar percent (19.4%) of all youth needed prescription medication for a chronic condition. About 5.9% of all Ohio youth had fair or poor dental health.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

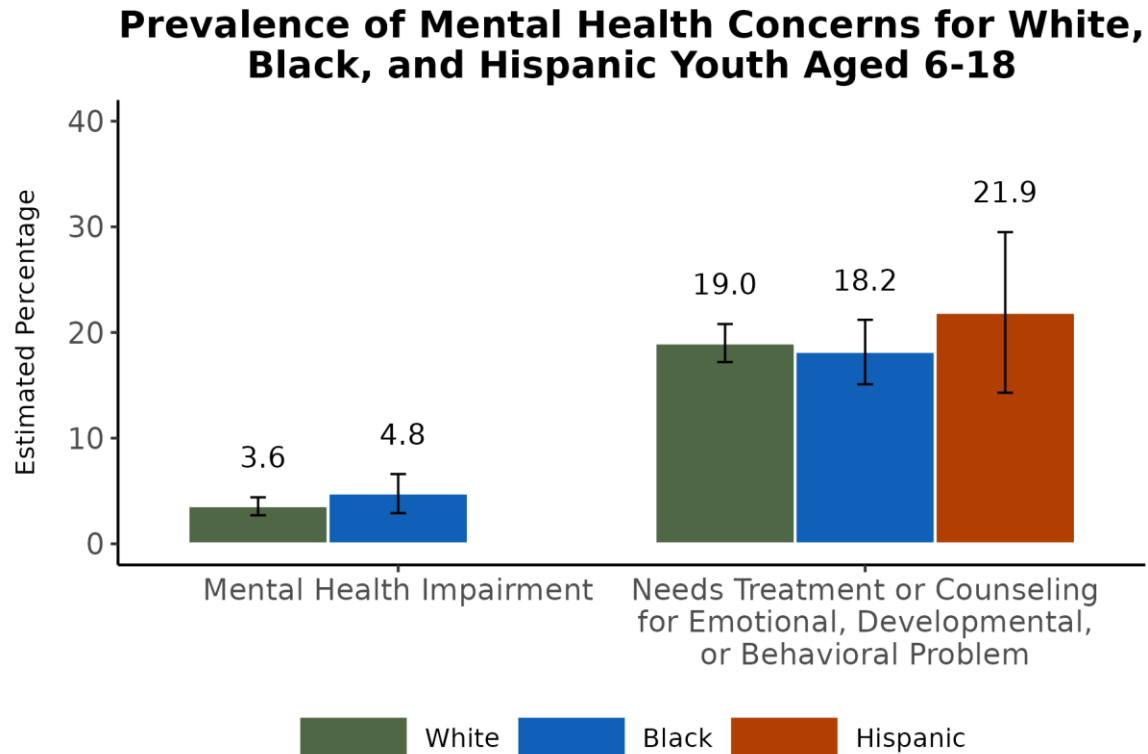
Compared to youth with employer-sponsored insurance, those with Medicaid had a higher prevalence of most health conditions

Health Condition	Ages	Medicaid			Employer-sponsored		
		%	90% C.I.		%	90% C.I.	
Obesity	6-18	27.8%	25.5%	30.4%	14.8%	12.9%	16.7%
Needed prescription medication for a condition lasting 12+ months	0-18	21.7%	19.7%	23.7%	18.1%	16.4%	19.8%
Needed treatment/counseling for emotional, developmental, or behavioral problem	0-18	19.0%	17.1%	20.9%	13.4%	11.8%	15.0%
Mental health impairment	6-18	7.1%	5.6%	8.6%	1.5%	0.9%	2.0%
Caregiver-rated dental health is “fair” or “poor”	0-18	8.2%	6.9%	9.6%	3.2%	2.4%	4.0%
Caregiver-rated overall health is “fair” or “poor”	0-18	3.3%	2.3%	4.2%	1.8%	1.2%	2.3%

- The prevalence of obesity among Medicaid-enrolled youth (27.8%) was nearly twice the prevalence as for youth with employer-sponsored insurance (14.8%).
- Such differences persisted across nearly all the mental and physical health conditions measured.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Mental health concerns were similarly common among White, Black, and Hispanic youth



OMAS 2023

Vertical bars represent 90% CIs

MHI estimates for Hispanic youth did not meet reliability criteria for reporting

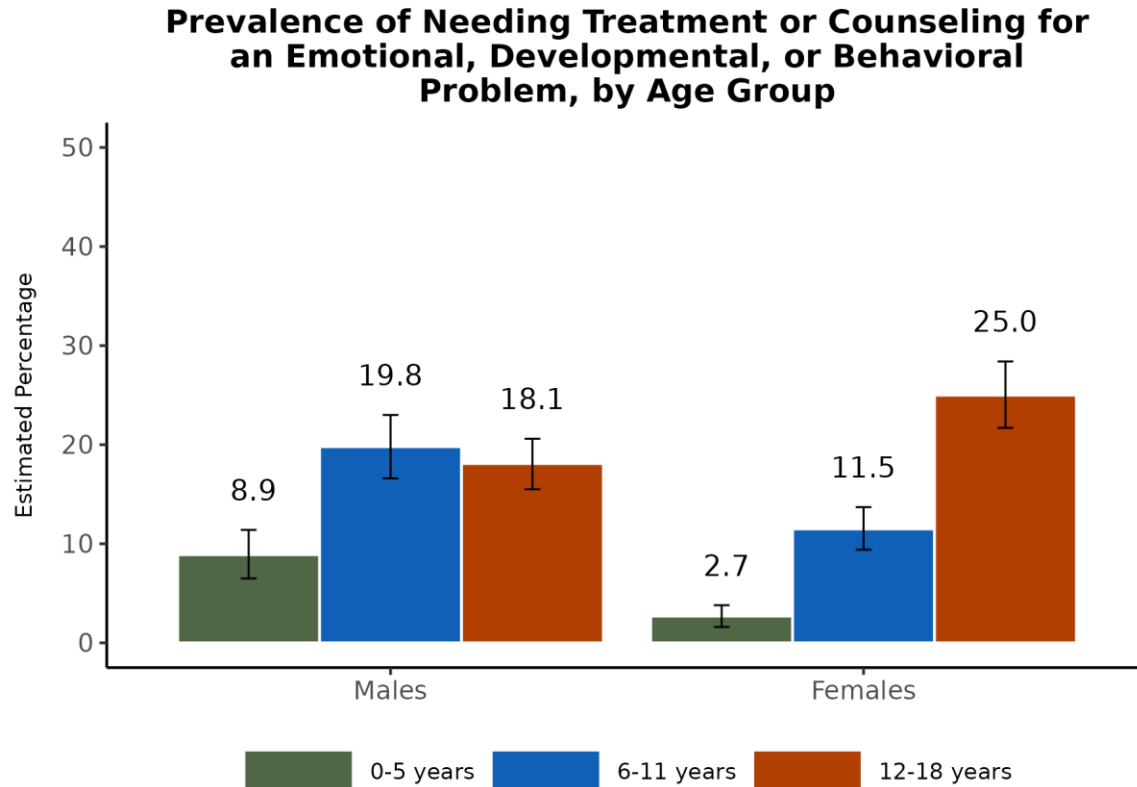
Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

- White, Black, and Hispanic youth had a similar prevalence of needing treatment or counseling for an emotional, developmental, or behavioral problem. White and Black had a similar prevalence of mental health impairment (MHI).

Additional Insights for 2023 (Results Not Shown)

- The similarities for both measures persisted for both males and females, for both older (12-18) and younger (6-11) youth, and for youth from both higher-income (> 206%FPL) and lower-income (<= 206%FPL) families.
- Analyses of OMAS data from 2019 and 2021 also found that MHI prevalence was similar for White and Black youth.
- There were too few Hispanic youth with MHI for reliable estimates, and earlier OMAS surveys did not include comparable measures of needing treatment or counseling for an emotional, developmental, or behavioral problem.

The prevalence of needing mental health treatment or counseling depended on both age and gender



- The prevalence of needing treatment or counseling for an emotional, developmental, or behavioral problem depended on age and gender. At younger ages, males had a higher prevalence than females. For youth 12-18 years old, however, females had a higher prevalence than males.

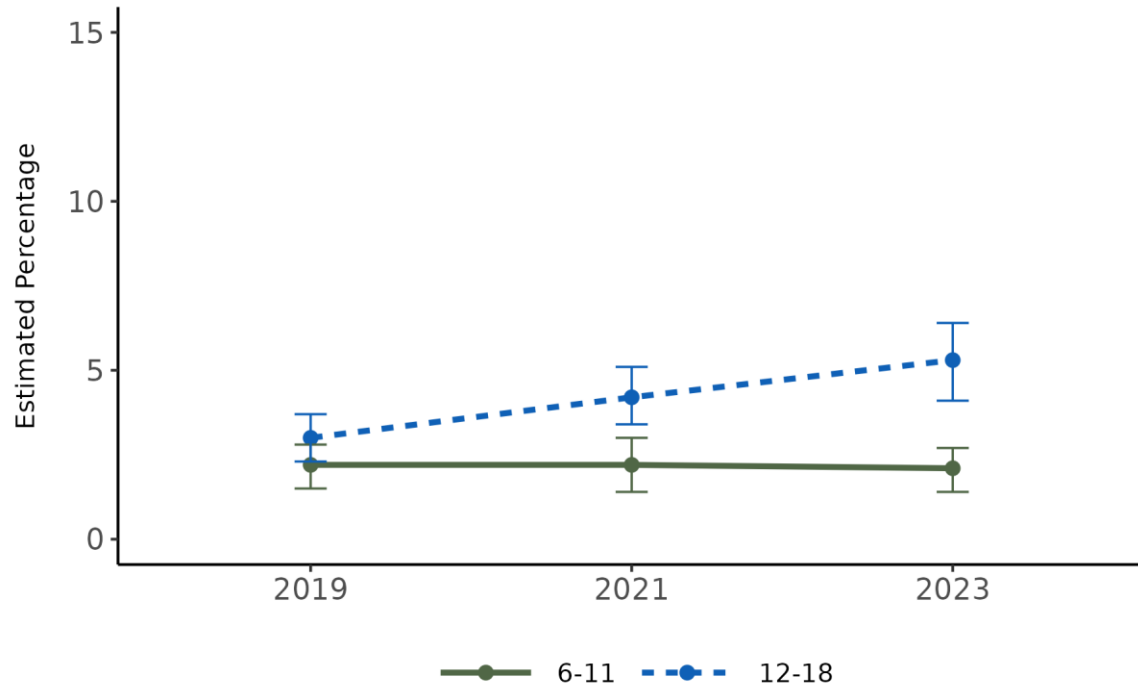
Additional Insights for 2023 (Results Not Shown)

- The prevalence of mental health impairment (MHI) did not differ by gender. MHI was, however, more common among all youth 12-18 years old (5.3%, 90% CI: 4.1%-6.4%) than among than among all youth 6-11 years old (2.1%, 90% CI: 1.4%-2.7%). MHI was not measured for youth less than 6 years old.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Since 2019, mental health impairment has increased among youth 12-18 years old

Prevalence of Mental Health Impairment by Age Group, 2019-2023



OMAS 2019-2023
Vertical bars represent 90% CIs

- For youth 12-18 years old, the prevalence of mental health impairment (MHI) increased from 3.0% in 2019 to 5.3% in 2023. For youth 6-11 years old, however, MHI prevalence did not change during this period.

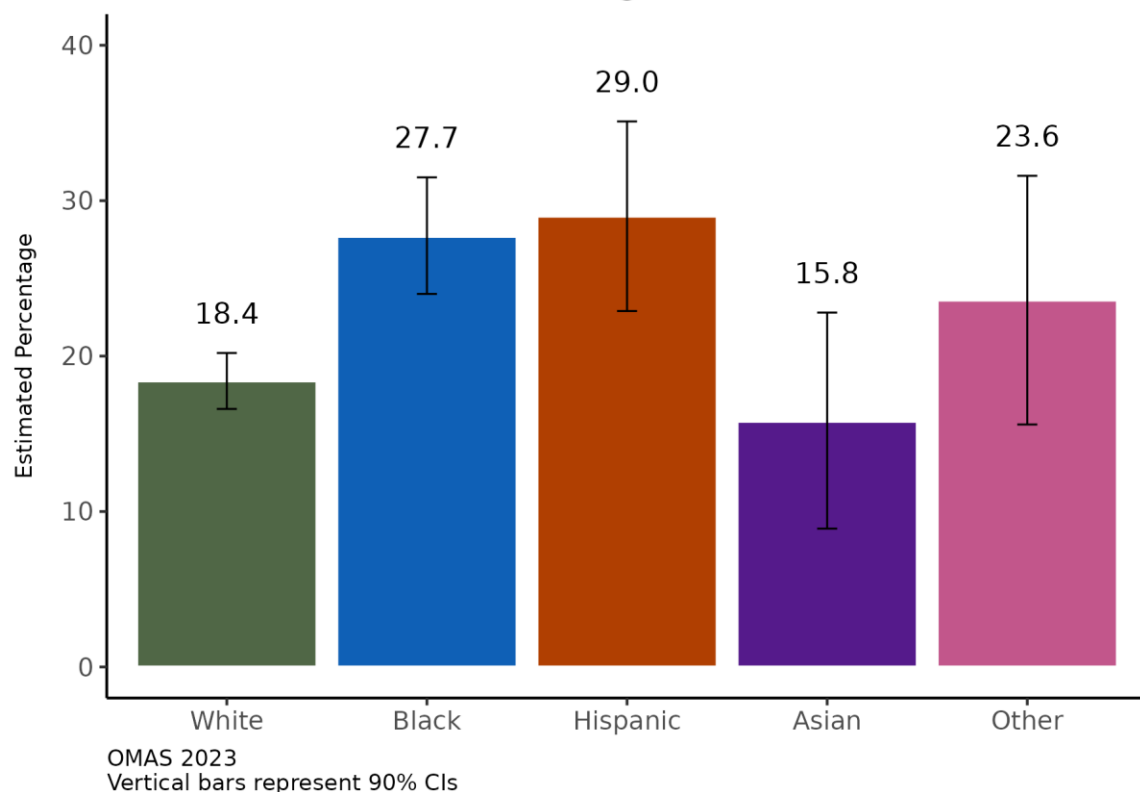
Additional Insights for 2023 (Results Not Shown)

- The MHI growth trend for youth 12-18 years old persisted for males and females and for different income levels.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Obesity was most common among younger youth who were Black or Hispanic and those living in rural Appalachian counties

Prevalence of Obesity by Race/Ethnicity Among Youth Aged 6-18



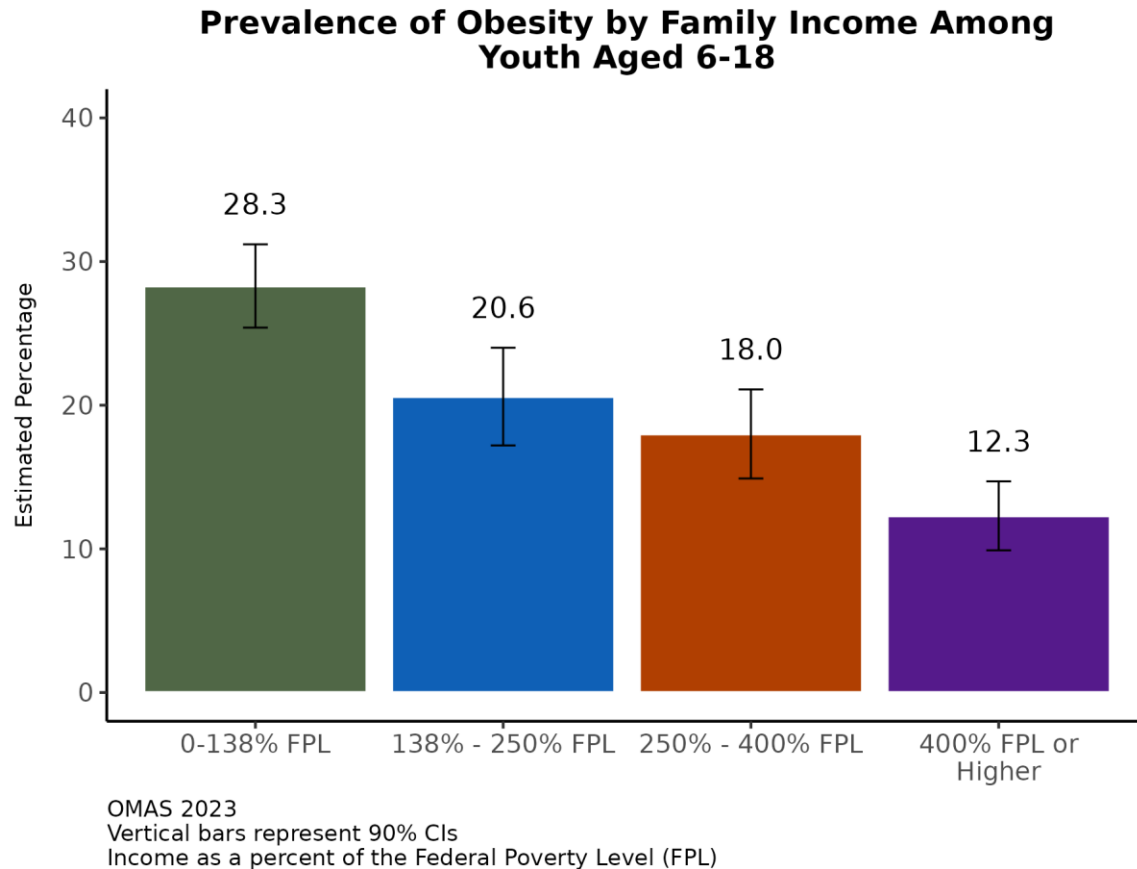
- Having an obese body mass index (BMI) was more common among Black (27.7%) and Hispanic (29.0%) youth aged 6-18 compared to White (18.4%) and Asian (15.8%) youth.

Additional Insights for 2023 (Results Not Shown)

- Age was associated with obesity, being more common among youth 6-11 years old (26.0%, 90% CI: 23.4%-28.6%) than among those 12-18 years old (17.1%, 90% CI: 15.3%-18.9%).
- Youth living in rural Appalachian counties had a higher prevalence of obesity (26.0%, 90% CI: 22.1%-29.9%) compared to those in rural non-Appalachian (18.3%, 90% CI: 14.7%-21.8%) and suburban (17.6%, 90% CI: 14.0%-21.1%) counties. This difference appeared for males and females and for different age and income groups.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Obesity was strongly associated with family income



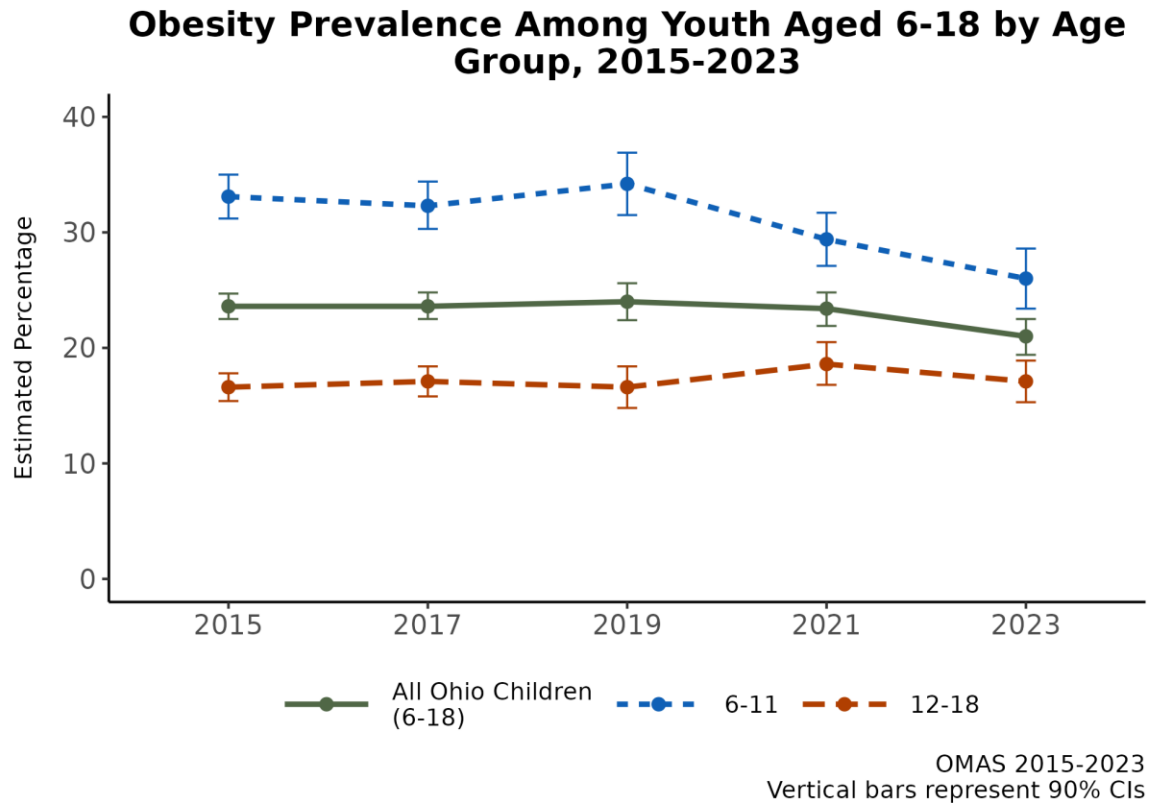
- Obesity among youth aged 6-18 was strongly associated with family income. Over one quarter (28.3%) of youth from families with incomes less than 138% FPL were obese.

Additional Insights from 2023 (Results Not Shown)

- Among lower-income families, certain subpopulation prevalence rates were particularly high. For instance, 41.7% (90% CI: 33.8%-49.7%) of Black youth 6-11 years old from lower-income ($\leq 206\%$ FPL) families were obese.
- Among youth aged 6-18 from lower-income families, obesity prevalence was similar for youth with Medicaid (28.1%, 90% CI: 25.3%-31.0%) and those who were uninsured (33.7%, 90% CI: 21.3%-46.0%) but was lower for youth with employer-sponsored insurance (15.7%, 90% CI: 10.8%-20.6%).

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Overall, obesity prevalence has been stable since 2015



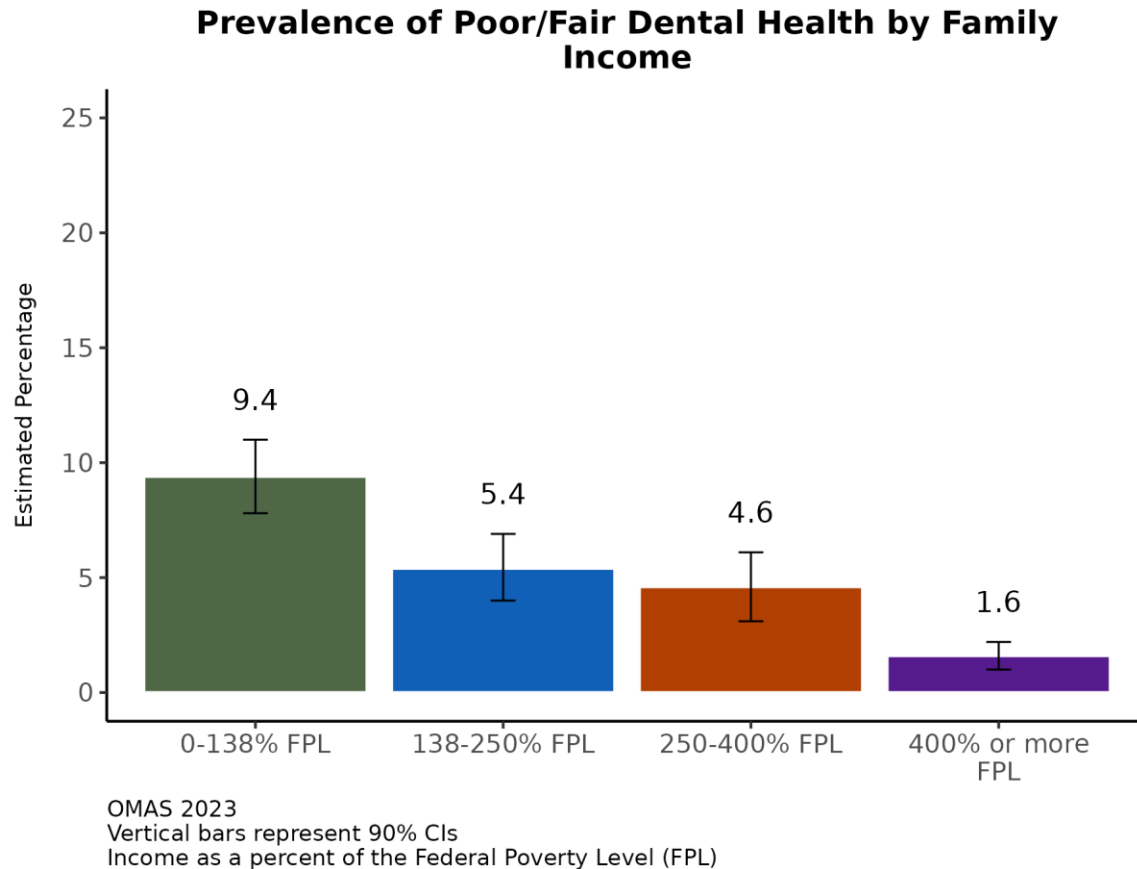
Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

- Overall prevalence has remained stable since 2015.
- Since 2019, obesity prevalence has declined among youth 6-11 years old, decreasing from 34.2% in 2019 to 26.0% in 2023. This appears to have been driven by a decrease in the prevalence of obesity among males in this age group (see below). In comparison, obesity prevalence for youth 12-18 years old was 16.6% in 2019 and 17.1% in 2023.

Additional Insights (Results Not Shown)

- The stability in overall obesity prevalence (aged 6-18) was observed for Medicaid-enrolled youth, as well as for non-Medicaid youth from lower-income ($\leq 206\%$ FPL) and higher-income ($>206\%$ FPL) families.
- The decline in obesity among youth 6-11 was more pronounced for males, decreasing from 38.4% in 2019 (90% CI: 34.4%-42.5%) to 25.2% in 2023 (90% CI: 21.8%-28.6%). For females in this age group, obesity prevalence was similar in 2019 (29.8%, 90% CI: 26.1%-33.5%) and 2023 (26.9%, 90% CI: 22.9%-30.9%).

Poor/Fair dental health was strongly associated with family income



- An estimated 9.4% of youth from families with incomes less than 138% FPL had “fair” or “poor” caregiver-rated dental health compared to only 1.6% of youth from families with incomes 400% or more FPL. This pattern persisted for male and female youth, youth of different ages, and youth who lived in different county types.

Additional Insights for 2023 (Results Not Shown)

- Fair/poor dental health was more common for Black youth (7.6%, 90% CI: 5.6%-9.5%) than for White youth (4.7%, 90% CI: 3.9%-5.6%). This difference could be explained by the groups’ differences in income: among lower-income families there were no Black/White differences in fair/poor dental health.
- Since first measured in 2021, the overall prevalence of fair/poor dental health has remained stable.

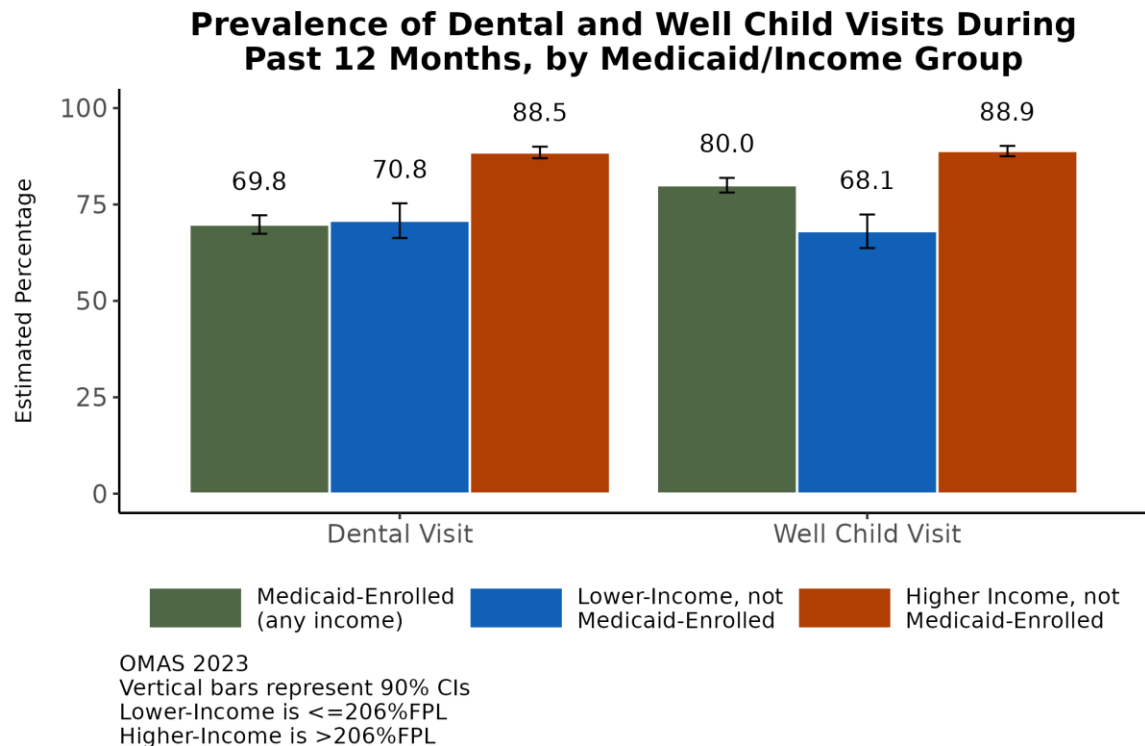
Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

RESULTS: ACCESS TO HEALTH CARE

Health care utilization and unmet needs among Ohio youth in 2023



Compared to other youth from lower-income families, Medicaid youth had a higher prevalence of having a well child visit in the past year



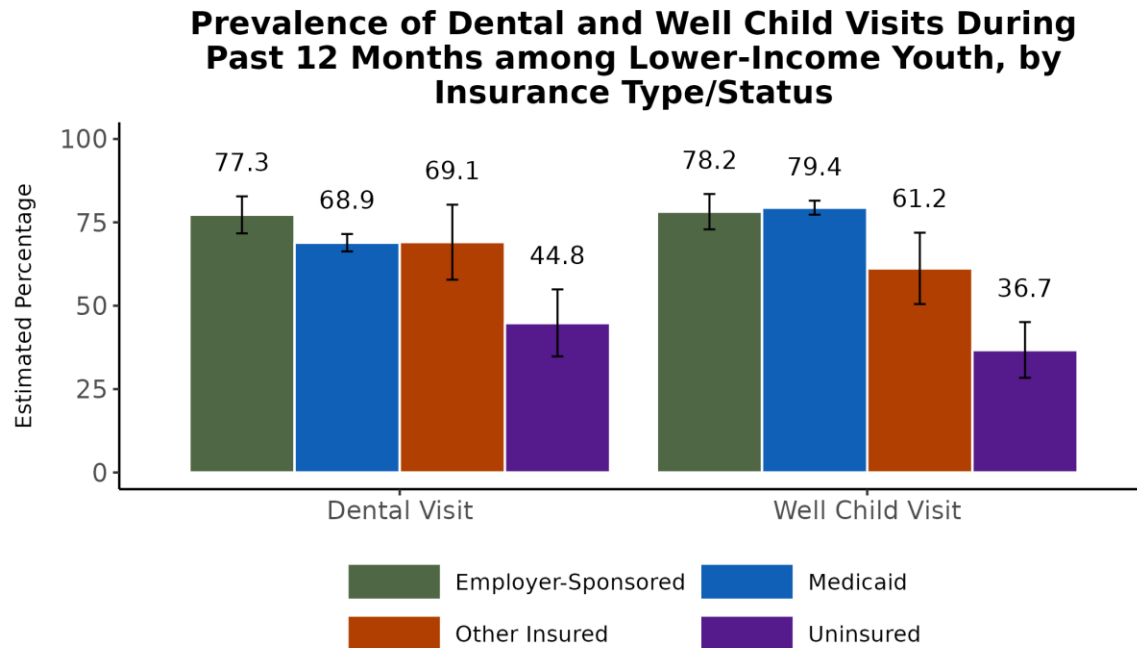
- Compared to youth from lower-income families (68.1%), Medicaid youth (80.0%) had a higher prevalence of having a well child visit in the past 12 months. Yet, well child visits were most common among non-Medicaid youth from higher-income families (88.9%).
- Dental visits were similarly common for Medicaid youth (69.8%) and youth from lower-income families who did not have Medicaid (70.8%) but were most common for non-Medicaid youth from higher-income families (88.5%).

Additional Insights for 2023 (Results Not Shown)

- The above patterns persisted for both females and males, and for different racial/ethnic groups and county types.
- Statewide estimates were 78.0% (90% CI: 76.6%-79.4%) for dental visits and 82.2% (90% CI: 81.0%-83.4%) for well child visits.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Among youth from lower-income families, those with employer-sponsored insurance and Medicaid had a similar prevalence of well child visits



OMAS 2023
Vertical bars represent 90% CIs
Lower-Income is $\leq 206\%$ FPL

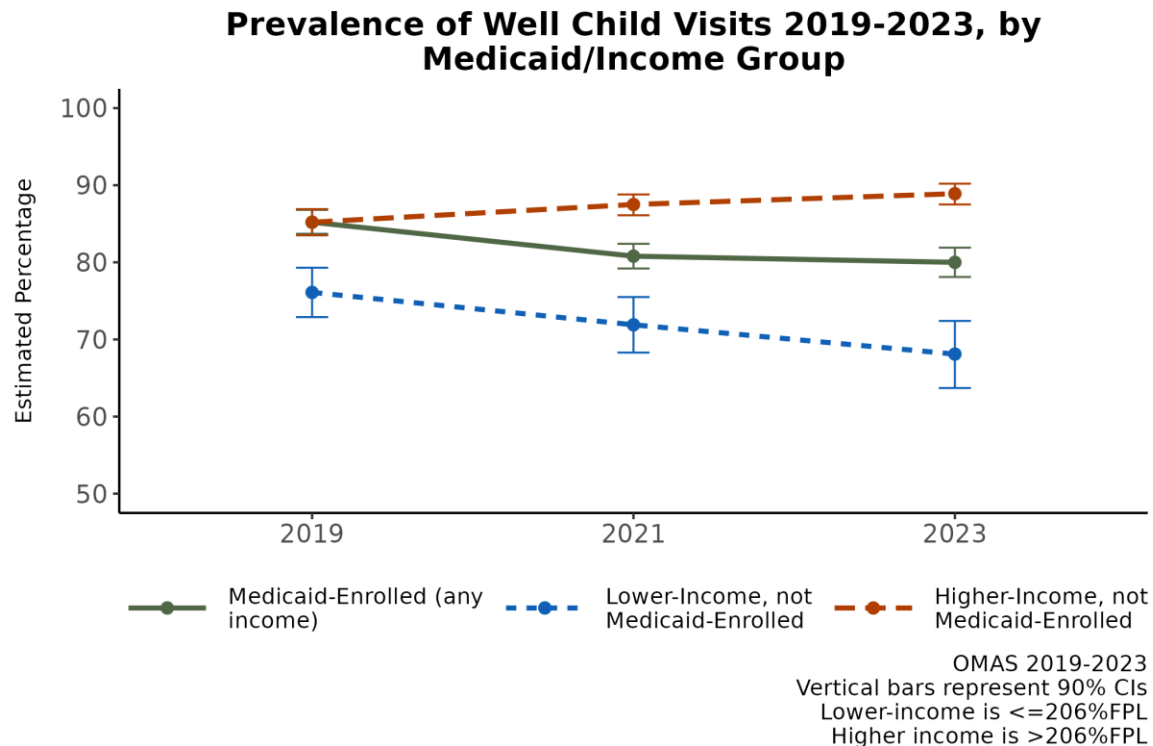
- Among youth from lower-income families ($\leq 206\%$ FPL), those with Medicaid (79.4%) or employer-sponsored insurance (78.2%) had a similar prevalence of having a well child visit during the past 12 months. Those with other types of insurance had a lower prevalence (61.2%) and only 36.7% of uninsured youth had a well child visit during the past 12 months.
- For dental visits, youth with Medicaid had a lower prevalence (68.9%) compared to those with employer-sponsored insurance (77.3%). Only 44.8% of uninsured youth from lower-income families had a dental visit in the last 12 months.

Additional Insights for 2023 (Results Not Shown)

- Among youth from lower-income families, the prevalence of dental and well child visits did not differ by sex, race/ethnicity or county type.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Since 2019, the prevalence of well child visits has declined for Medicaid youth



- The statewide prevalence of well child visits has remained stable since 2019, but this masks differences by family income and Medicaid enrollment. The prevalence for well child visits for Medicaid youth *decreased* from 85.2% in 2019 to 80.0% in 2023.
- A similar trend was observed for youth from lower-income families who are not enrolled in Medicaid, declining from 76.1% in 2019 to 68.1% in 2023.
- In contrast, the prevalence of well child visits for youth from higher-income families who are not enrolled in Medicaid *increased* during this same period from 85.2% in 2019 to 88.9% in 2023.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Prevalence of unmet dental and mental health care needs among youth with Medicaid and ESI

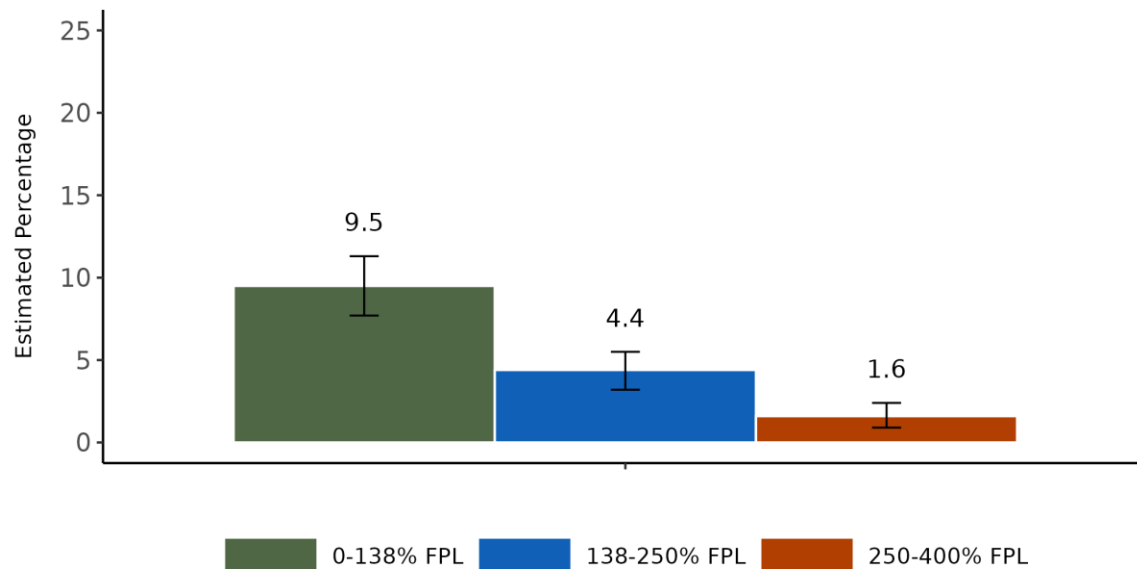
		All Youth			Medicaid			Employer-sponsored		
	Ages	%	90% C.I.		%	90% C.I.		%	90% C.I.	
Unmet dental health care needs	0-18	5.1%	4.3%	5.9%	8.7%	7.2%	10.3%	—	—	—
Unmet mental health care needs	12-18	4.0%	3.1%	5.0%	5.7%	3.9%	7.4%	1.8%	1.2%	2.5%

- Statewide, 5.1% of youth had unmet dental health care needs. Compared to all Ohio youth, those enrolled in Medicaid had a higher prevalence of unmet dental health care needs (8.7%). (There were too few youth with employer-sponsored insurance who had unmet dental health care needs to generate reliable estimates.)
- Youth with Medicaid had a higher prevalence of unmet mental health care needs (5.7%) compared to youth with employer-sponsored insurance (1.8%).

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Nearly 1 in 10 youth from the lowest-income families had unmet dental health care needs

Prevalence of Unmet Dental Care Needs by Family Income



OMAS 2023
Vertical bars represent 90% CIs
Estimates for youth >400%FPL did not meet reliability criteria for reporting

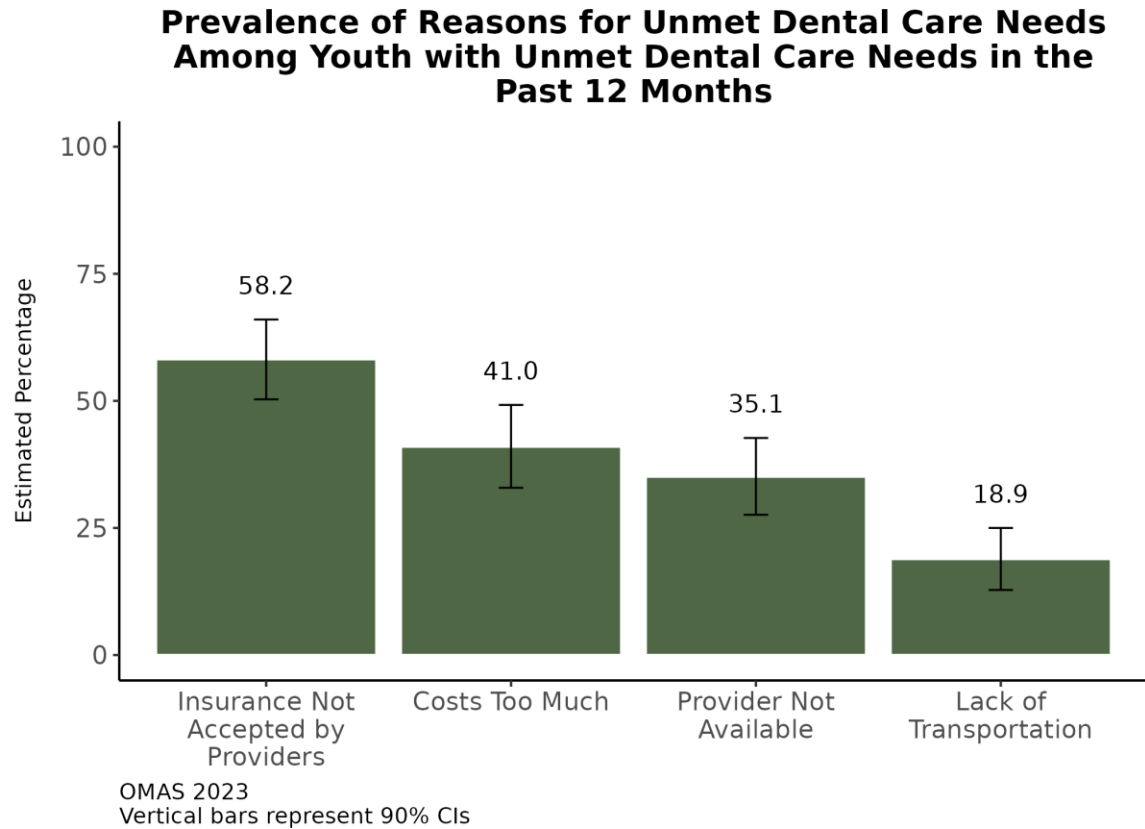
- About 9.5% of youth from the lowest-income families had unmet dental care needs during the past 12 months, compared to only 1.6% of youth from higher-income families.

Additional Insights for 2023 (Results Not Shown)

- Among lower-income families, there were no differences in unmet dental health care needs by insurance type/status, nor by age group, gender, or race/ethnicity.
- However, lower-income youth from metropolitan counties had a greater prevalence of unmet dental health care needs (10.0%, 90% CI: 7.8%-12.1%) compared to lower-income youth from Appalachian (4.6%, 90% CI: 2.6%-6.6%) and suburban (4.7%, 90% CI: 2.6%-6.8%) counties.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

The most common reason for unmet dental health care needs was insurance not accepted by providers



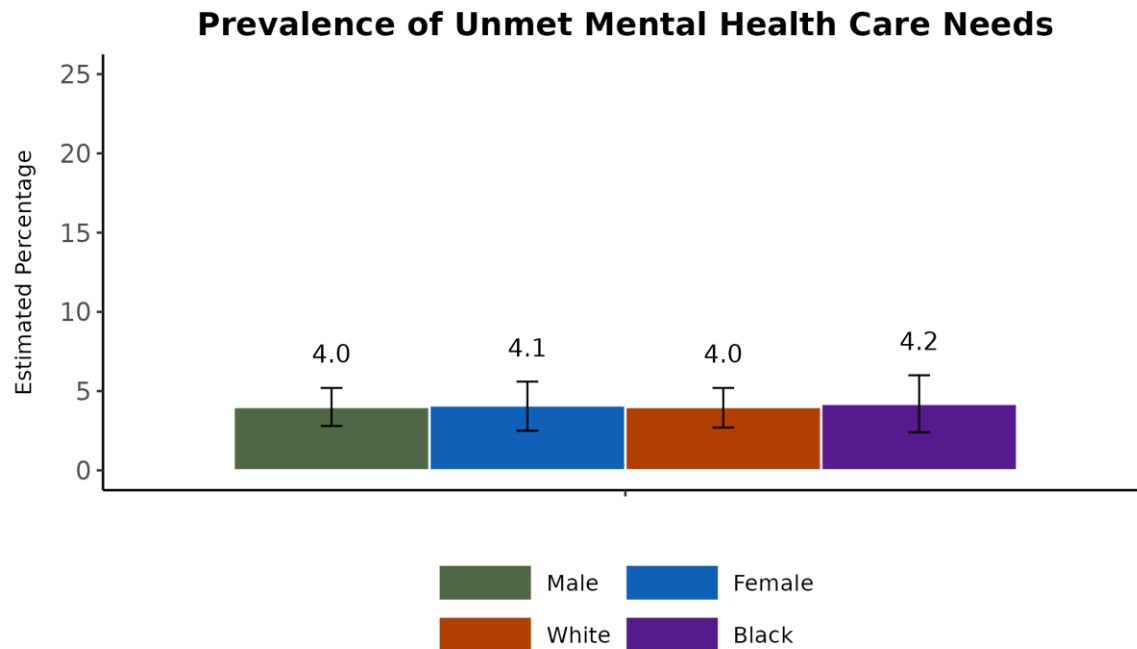
- Insurance not accepted by providers (58.2%) was more common than costs too much (41.0%), provider not available (35.1%) or lack of transportation (18.9%) as a reason for youths' unmet dental health care needs.

Additional Insights for 2023 (Results Not Shown)

- This finding persisted for males and females, older and younger youth, White and Black youth, and for different income groups. Sample sizes were too small to compare insurance types/statuses or county types.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Unmet mental health care needs were equally common among male and female, White and Black youth

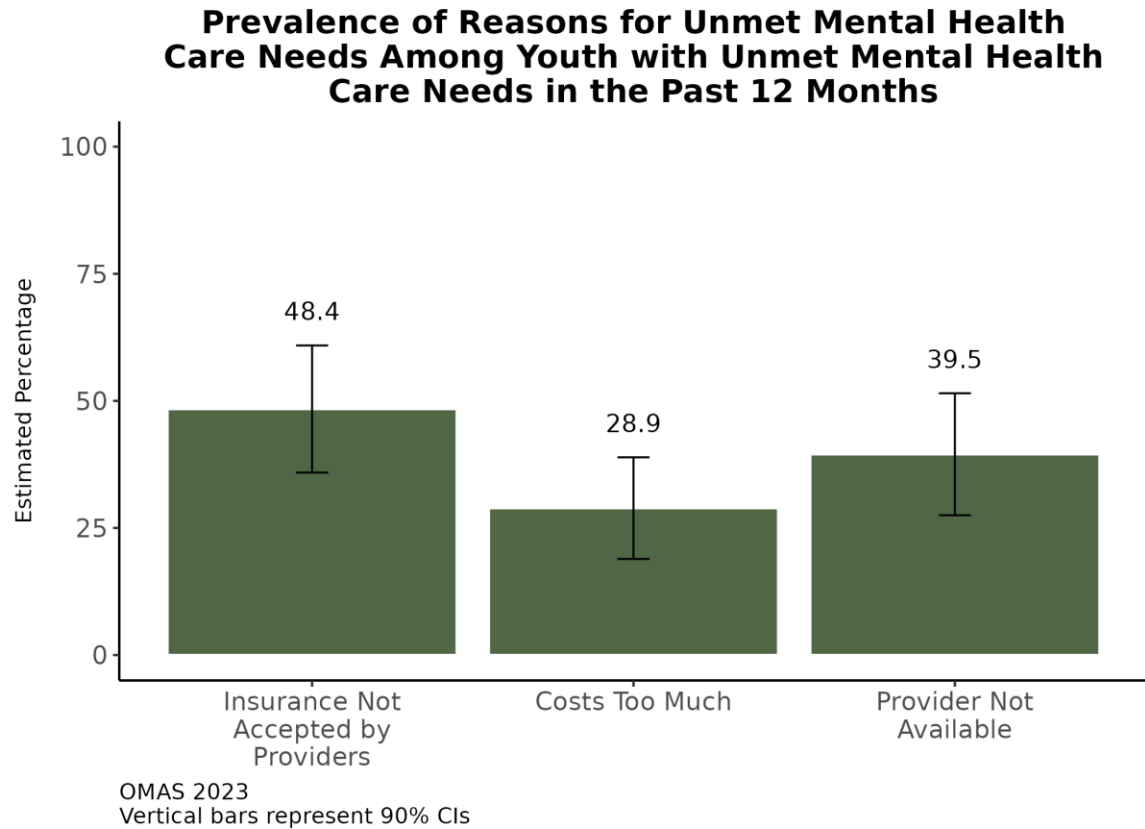


OMAS 2023
Vertical bars represent 90% CIs
Estimates for other racial/ethnic groups did not meet reliability criteria for reporting

- Unmet mental health care needs were similarly common among male and female youth and among youth who were White or Black.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

A common reason for unmet mental health care needs was insurance not accepted by providers



- Insurance not accepted by providers (48.4%) was more common than costs too much (28.9%) as a reason for youths' unmet mental health care needs.
- Estimates for lack of transportation as a reason for unmet need had to be suppressed due to low precision.

Additional Insights for 2023 (Results Not Shown)

- This finding persisted for males and females and for different income groups.

Note: Observed group differences should not be used to draw conclusions about underlying causes - see slide 9 for more guidance.

Summary of Results



- Mental health impairment has been increasing among youth 12-18 years old since 2019. The prevalence of needing treatment or counseling for an emotional, developmental or behavior problem is especially high for females 12-18 years old (25.0%).
- Since 2015, obesity has remained stable for most youth, yet analyses suggest it has been declining among males 6-11 years old since 2019. It remains unclear why the decline in obesity was limited to males 6-11 years old, or what might be causing it.
- Compared to their peers from higher-income families, youth from lower-income families have a higher prevalence of health conditions. Most of these youth are served by Medicaid and compared to youth with employer-sponsored insurance, have more unmet dental and mental health care needs. A common reason for both unmet dental and mental health care needs was that the provider would not accept the youth's insurance.

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