









AUTHORS

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EXECUTIVE SUMMARY

The physical and mental health of children and adolescents are a concern to policy makers, affecting the current and future wellbeing of Ohio communities. Although many children and adolescents are healthy, the experience of stressful environments can cause both short- and long-term health consequences. This chartbook focuses on Ohio youth and presents data on the prevalence of: (1) sociodemographic statuses; (2) adverse childhood experiences (ACEs) (e.g., having a parent die); (3) health outcomes and statuses; (4) health care utilization; and (5) unmet health care needs. Analyses examine these findings by insurance status (Medicaid-enrolled and non-Medicaid lower-income youth) and age (0 to 5, 6 to 12, and 13 to 18).

Key Findings

- The percent of youth covered by employer-sponsored insurance (ESI) has steadily declined since 1998.
- Older youth were less likely than younger youth to be enrolled in Medicaid. Across age groups, Black or African American youth were more likely than other youth to be Medicaid-enrolled. Across all youth age groups, rates of Medicaid enrollment were higher in rural Appalachian counties compared to other Ohio county types.
- Adverse childhood experiences (ACEs), potentially stressful experiences such as exposure to violence and parental death, were more prevalent among Medicaid-enrolled youth than among other lower income youth. For instance, among youth ages 13 to 18, 74.5% of Medicaid-enrolled youth had ever experienced any ACE vs 57.2% of non-Medicaid, lower-income youth. Among all Ohio youth, 64.8% of Black or African American youth had ever experienced any ACE, compared to 50.3% of white youth, and 60.3% of Hispanic youth.

- Compared to other youth, Medicaid-enrolled youth were more likely to be reported as having fair or poor health status, impaired mental health, asthma, and obesity. Among all Ohio youth, 64.8% of Black or African American youth had ever experienced any ACE, compared to 50.3% of white youth, and 60.3% of Hispanic youth. Medicaid-enrolled youth who experienced more ACEs were more likely than youth with fewer ACEs to report mental health impairment and asthma.
- Compared to non-Medicaid lower-income youth, Medicaidenrolled youth were generally as likely or more likely to utilize health services – including routine check-ups, dental visits, and emergency room visits.
- Compared to non-Medicaid lower-income youth, Medicaidenrolled youth were less likely to delay or avoid care in the past year and were more likely to find accessing medical care easier, compared with three years ago.

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



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BACKGROUND

The physical and mental health status of children and adolescents is a critical concern for policy makers, 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 and adolescents' wellbeing can have profound and wide-ranging consequences in adulthood. 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. Consequently, understanding the social distribution of child and adolescent risk through the lens of social determinants of health risk factors, health outcomes, and health care utilization patterns is important for Ohio.

Over the course of childhood and adolescence, health risks and outcomes change, highlighting the need for information across the age range to better target resources for Ohio's youth population.

Although childhood and adolescence can be the healthiest stages of life, stressful environments can induce both short-and long-term health consequences. Adverse childhood experiences (ACEs), potentially traumatic or stressful events that occur before the age of 18, are a particularly important in that they may elevate the current and subsequent likelihood of poor physical and mental health. ACEs can take a variety of specific forms, including experiences of economic hardship, mental illness, substance use, violence, incarceration among family members, and exposure to discrimination and violence

in broader communities.^{5,6} Adverse environmental conditions often co-occur, pointing to the importance of understanding not only which groups experience greater exposure to specific types of events, but who is exposed to multiple adverse events over the course of childhood. Recent data from the National Survey of Children's Health found that Ohio is among five states with the highest rates of youth experiencing three or more (of 8) ACEs (15%).7 Adverse experiences may have behavioral, cognitive, emotional, and physiological effects with cumulative health consequences. Evidence indicates that exposure to challenging socioeconomic environments and associated adverse events during childhood predict a range of health conditions in adulthood including cancer, 8,9 heart disease, 10 respiratory disease, 8 and poor mental health (e.g. depression), 11 suicidal behaviors, 12 as well as engagement in health risk behaviors (e.g. smoking, substance use, sexualrisk).

Consequently, information on the distribution of exposure to adverse events across youth of different ages compared to income/insurance profiles is critical for understanding disparities in physical and mental health outcomes, health care utilization, and health care needs across Ohio's youth population.



OBJECTIVES

The purpose of this chart book is to present an overview of physical and mental health risk factors and health outcomes for Ohio's child and adolescent populations based on data from the 2019 Ohio Medicaid Assessment Survey (OMAS), with data supplements from select national surveys. Specific objectives include presenting:

- 1. How Ohio youths' insurance status has changed over the past two decades.
- 2. How Ohio youths' insurance status varies by demographic background, comparing those who are Medicaid-enrolled and non-Medicaid lower-income (household income equal to or below 206% of the federal poverty level (\$26,183 in annual family income for a family of three, reference year 2018)) by age (three age groups: ages 0 to 5, 6 to 12, and 13 to 18), race/ethnicity and county type.
- 3. How health-relevant adverse childhood experiences (ACEs) vary by insurance status and age, and the association of ACEs with poor health outcomes within these groups.
- 4. How Ohio youths' health care utilization and unmet health care needs vary by insurance status and age.
- 5. How these findings relate to policy considerations for Ohio's health and human services agencies.



METHODS

Description of Data Sources

- The primary data source for this report is the child interviews of the 2019 Ohio Medicaid Assessment Survey (OMAS), collected between August and December 2019. The OMAS is a mixed cell phone and landline phone telephone survey of adults and children. The sample consist of random digit dial (RDD) and address-based sampling (ABS) components. The adult sample was 31,558.
- When an adult survey respondent indicated that there was one or more children age 0-18 years in the household, the interviewer selected the child who had the most recent birthday for a child interview – all child interviews were by proxy, answered by an adult most knowledgeable of the selected child's health status. There were 7,404 child proxy interviews in the 2019 OMAS.
- Estimates for tobacco exposure in the home were taken from the 2019 Ohio Youth Risk Behavior Survey (YRBS), which is part of an effort led by the U.S. Centers for Disease Control and Prevention (CDC) to monitor students' health risks and behaviors in six categories identified as most likely to result in adverse outcomes. These categories include unintentional injury and violence; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and disease; dietary behaviors; and physical inactivity.

Analyses

- Descriptive statistics are reported in the figures throughout the chartbook – no significance testing was performed.
- Households with total income greater than 206% of the federal poverty level (more than \$26,183 in annual family income for a family of three) were not included in the analyses due to their more limited relevance as a comparison population for Medicaid-enrolled youth.
- Low reliability estimates (indicated with an asterisk in the figures below) are defined as those with a coefficient of variation greater than 30% of the point estimate. The coefficient of variation is a measure of estimate precision.

Subpopulations/Categories

- Medicaid enrolled are youth reported by the adult respondent as being enrolled in Medicaid at the time interview.
- Non-Medicaid children are those reported by the adult respondent as not being enrolled in Medicaid at the time of interview and may include other types of health insurance (e.g., employer-sponsored insurance) or being uninsured – the 206% federal poverty level cut for analyses corresponds with the financial cap for a child being Medicaid eligible.
- The category "All" refers to all child cases that were included in a specific table or graph and includes Medicaid enrolled and non-Medicaid children – note that the All category is specific to the total numerator for analyses for each slide, independently.



METHODS

Variable definitions

The key variables used in this chartbook are briefly summarized below. For complete details, please refer to the 2019 OMAS Methods Report and the 2019 OMAS Codebook at https://grc.osu.edu/OMAS. Note that "youth" refers to 0- to 18-year-olds, "children" refers to 0- to 12-year-olds, and "adolescents"/"teenagers" refer to 13- to 18-year-olds.

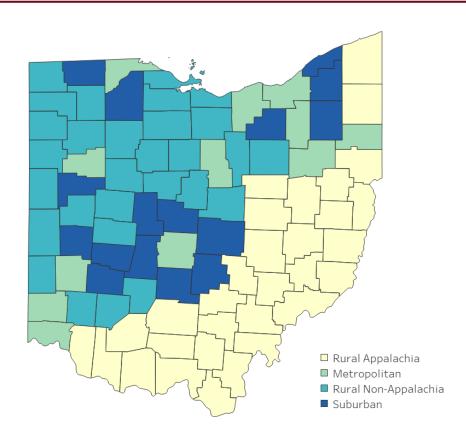
- Insurance status consisted of two categories:
 - Medicaid enrolled: Children enrolled in Medicaid.
 - Non-Medicaid lower-income: Children not enrolled in Medicaid but household income less than 206% of the federal poverty level (potentially Medicaid-eligible). This group overwhelmingly consists of those with employer sponsored insurance, but also includes some youth with other forms of insurance, and those uninsured. Note that small sample sizes precluded presenting separate estimates for the non-Medicaid subgroups.
- Other key variables included the following information reported by a household adult:
 - Fair or poor health: Child's health was rated as "fair" or "poor" versus "excellent", "very good", or "good".
 - o *Mental health impairment*: For 7 or more of the past 30 days, a mental health

- condition or emotional problem kept the child from participating in school, social relationships with friends, or other usual activities.
- o Asthma: A doctor or other health care professional has told the household adult that the child has asthma.
- o Obesity: Child's body mass index (BMI) at or above the 95th percentile for youth of the same age and sex. BMI is calculated by dividing a person's weight in kilograms by the square of height in meters.
- o Adverse childhood experiences (ACEs):
 A scale of 8 questions about whether the child had ever experienced certain adverse events (e.g., parent or guardian died). The total was collapsed into 0, 1 to 3, or 4 or more adverse experiences.

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OMAS County Types



This chartbook contains analyses that refer to county types, which are Ohio counties grouped into demographic characteristics. OMAS defines these county types in accordance with federal definitions, as follows: (1) 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 is defined by the Federal Office of Rural Health Policy at the Health Resources and Services Administration (HRSA), excluding Appalachian counties; and (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. These designations were originally set by the Ohio Department of Health in 1997 for the 1998 Ohio Family Health Survey (OFHS) and were slightly adjusted in 2004 and again adjusted in 2010 to include Ashtabula and Trumbull counties as Appalachian, in accordance with a federal re-designation. Guidance for these categories was provided by National Research Council's Committee on Population and Demography staff – for original designations and revisions.



RESULTS: TRENDS IN INSURANCE STATUS

This section presents how Ohio adult and youth insurance (employer-sponsored insurance, Medicaid, and uninsured) has changed during the past two decades.

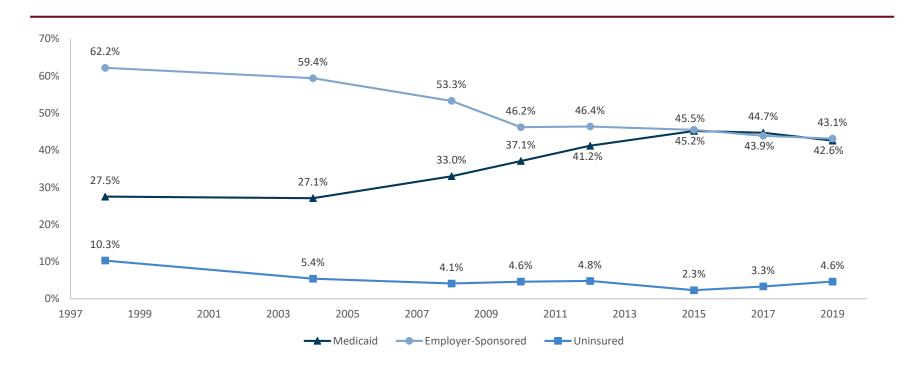
Key Findings: Trends in Insurance Status

- The percent of youth with employer-sponsored insurance (ESI) has steadily declined since 1998. (Figure 1)
- The percent of Ohio children living in households with incomes ≤ 206% of the federal poverty level (FPL) declined from 2012 to 2015. By 2019, however, the decline had ceased. (Figure 3)





Figure 1. Trends in Selected Insurance Coverage, Ohio Children*



The percent of employer-sponsored insurance (ESI) coverage for children has steadily declined since 1998 (from 62.2% to 43.1% in 2019). The decline in ESI coverage for children was even more marked than the decrease for adults (see previous slide). Concurrently, the percent of children enrolled in Medicaid increased from 27.5% in 1998, to 45.2% in 2015, but has since decreased to 42.6% in 2019

*Age 0-17 for 1998-2010, Age 0-18 for 2012-2019



Figure 2. Trends in Selected Insurance Coverage among Ohio Children Age 0-18 with Household Income at 206% FPL or Below

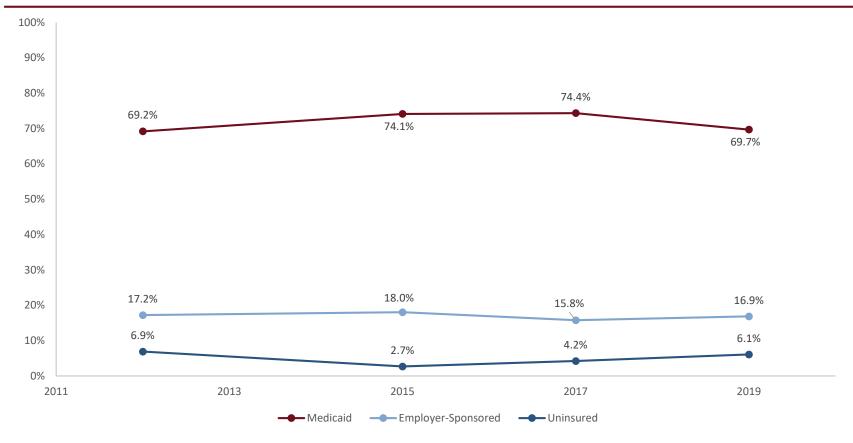
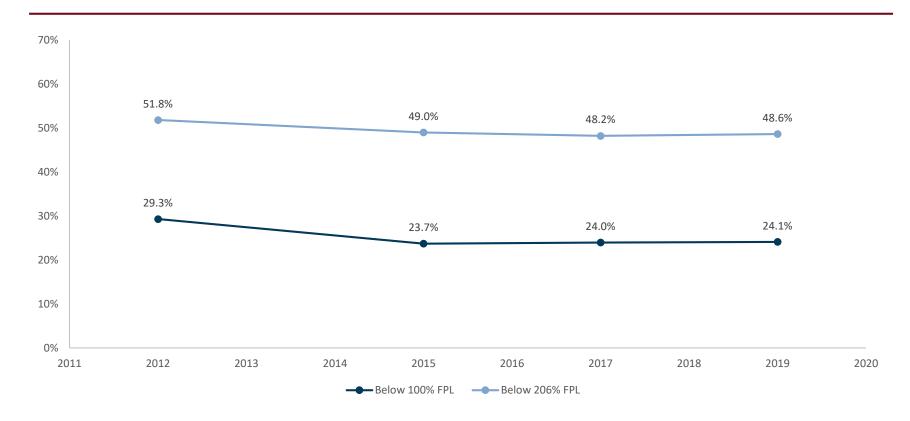




Figure 3. Trends in Proportion of Ohio Children Living at 100% & ≤ 206% FPL



The percent of Ohio children living in households with incomes < 206% of the federal poverty level (FPL) declined from 2012 to 2015. By 2019, however, the decline had ceased (reference year for reported income was 2018 annual income).



RESULTS: SOCIODEMOGRAPHIC AND INSURANCE STATUS

This section presents how Ohio youth's insurance status varies by age, race/ethnicity and county type.

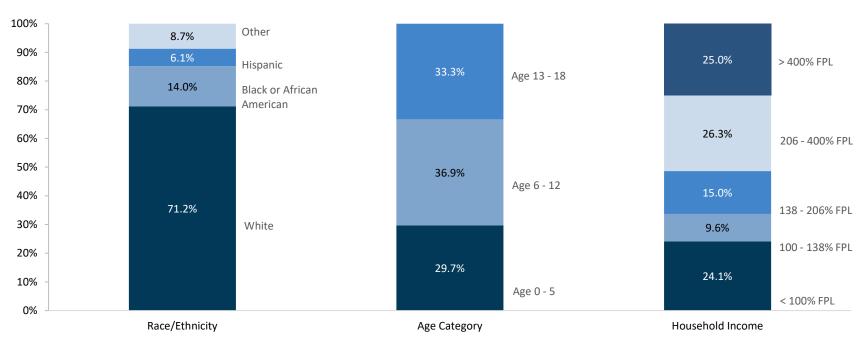
Key Findings: Sociodemographic & Insurance Status

- Older youth (ages 13 to 18) were less likely than younger youth to be enrolled in Medicaid. (Figure 5)
- 69.7% of lower-income youth (≤ 206% FPL) were enrolled in Medicaid. (Figure 6)
- 78.9% of lower-income Black or African American youth were enrolled in Medicaid. (Figure 7)
- 71.6% of lower-income youth from metropolitan counties and 74.3% from rural Appalachian counties were enrolled in Medicaid. (Figure 8)





Figure 4. Sociodemographic Composition among all Ohio Youth Ages 0 to 18

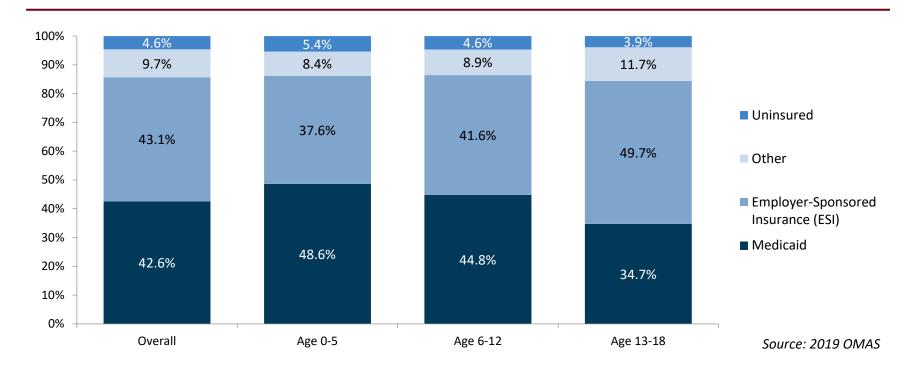


Source: 2019 OMAS

71.2% of Ohio youth age 0 to 18 were white, 14.0% were Black or African American, 6.1% were Hispanic, and 8.7% were of other race/ethnicity. Almost half (48.7%) of youth lived in households with incomes \leq 206% FPL and about a quarter (24.1%) lived in households with incomes \leq 100% FPL.



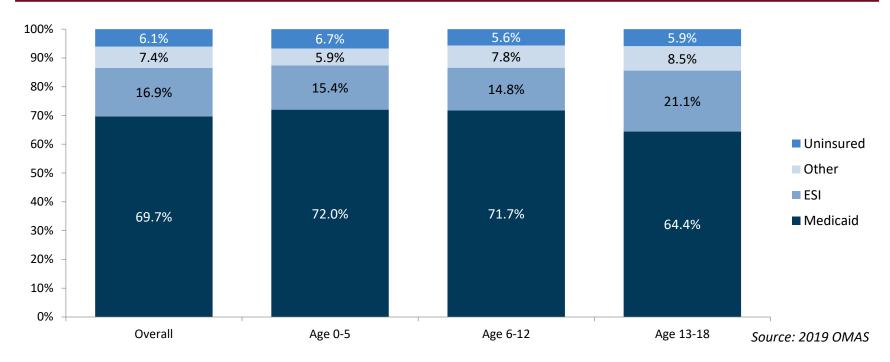
Figure 5. Insurance Type/Status among all Ohio Youth, by Age



Older youth ages 13 to 18 were less likely to be enrolled in Medicaid than younger youth: 48.6% of youth ages 0 to 5 were Medicaid-enrolled compared to 44.8% of 6- to 12-year-olds and 34.7% of 13- to 18-year-olds.



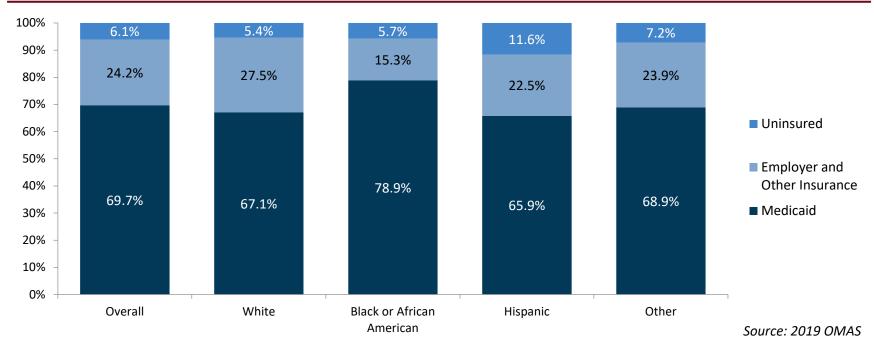
Figure 6. Insurance Type/Status among all Ohio Youth with Household Income 206% FPL or Below, by Age



Of youth from lower-income households, 69.7% were enrolled in Medicaid,16.9% were enrolled in employer-sponsored insurance (ESI), 7.4% had other types of insurance and 6.1% were uninsured. The percent of 13- to 18-year-olds enrolled in Medicaid was lower compared to other groups (64.4%).



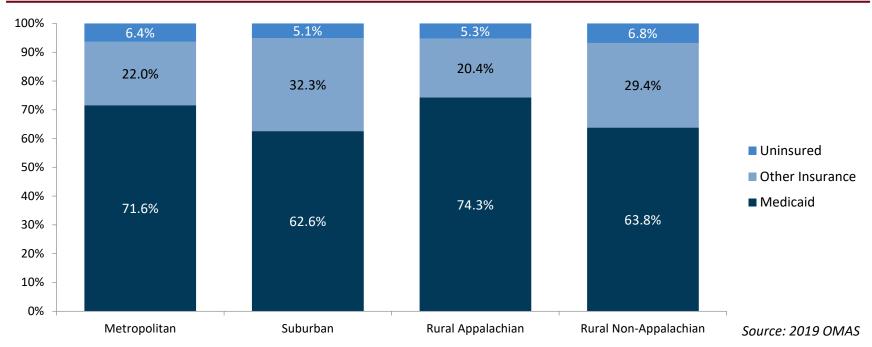
Figure 7. Insurance Type/Status among Ohio Youth with Household Income ≤ 206% FPL, by Race/Ethnicity



Overall, 42.6% of Ohio youth (ages 0 to 8) were insured by Medicaid, but this proportion varied by race/ethnicity. Among youth (ages 0 to 18) from lower-income households, a greater percent of Black or African-American youth were enrolled in Medicaid compared to youth from other race/ethnic groups. Also, a greater percent of Hispanic youth were uninsured, compared to white or Black or African American youth.



Figure 8. Insurance Type/Status among Ohio Youth with Household Income ≤ 206% FPL or Below, by County Type



For youth from lower-income households, those in rural Appalachian counties and metropolitan counties were more likely to be enrolled in Medicaid, compared to those from other county types. A greater percent of youth from rural non-Appalachian and suburban counties had employer and other types of insurance.



^{*} References to county type indicates groupings of counties that designate Appalachian, metropolitan, rural non-Appalachian, and suburban counties using federal government guidance. Please see explanation on slide 7, Methods.

RESULTS: ADVERSE CHILDHOOD EXPERIENCES (ACES) BY INCOME/ INSURANCE STATUS, AGE, AND RACE/ETHNICITY

This section describes how the adverse childhood experiences (ACEs) of Ohio youth vary by income, insurance status, age, and race/ethnicity\

Adverse Childhood Experiences & Health

- Adverse Childhood Experiences (ACEs) are potentially traumatic or stressful experiences that occur before the age of 18, there are 8 standard questions that measure ACEs.
- ACEs may take a variety of forms, including experiences of economic hardship, exposure to violence, living with someone with a mental illness or addiction, having a parent who has been incarcerated, and experiences of discrimination.
- Evidence indicates that ACEs predict a range of health conditions in adulthood, including cancer, heart disease, respiratory disease, and poor mental health. We consider associations between ACEs and three specific health conditions relevant for youth - mental health impairment, obesity, and asthma.
- See "Background" section above for additional details.





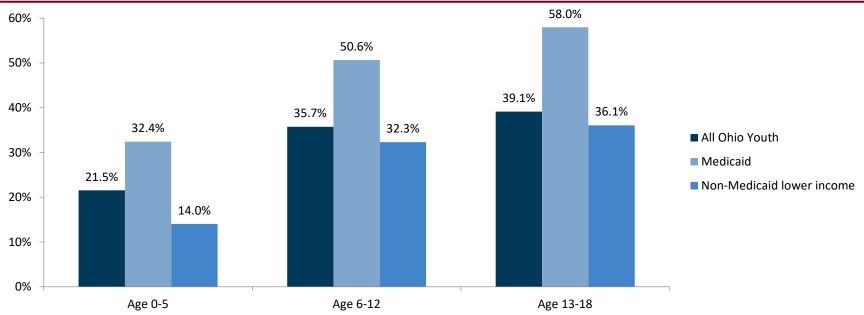
Key Findings: Adverse Childhood Experiences (ACEs) by Income/Insurance Status, Age, & Race/Ethnicity

- Medicaid-enrolled youth were more likely to have experienced individual ACEs. Among Medicaid youth ages 13 to 18
 - 58.0% experienced the divorce or separation of a parent or guardian vs. 36.1% of non-Medicaid, lower income youth (Figure 9)
 - 34.6% experienced incarceration of a parent or guardian vs. 15.8% of non-Medicaid, lower income youth (Figure 11)
 - 30.8% experienced living with someone with an alcohol problem vs. 17.6% of non-Medicaid, lower income youth (Figure 15)
 - 24.6% experienced living with someone who was mentally ill vs 20.4% of non-Medicaid lower income youth. (Figure 14)
- Among Medicaid-enrolled youth ages 13 to 18, 74.5% had ever experienced any ACE vs 57.2% of non-Medicaid, lower income youth. (Figure 16)
- Among Medicaid-enrolled youth ages 13 to 18, 24.8% of experienced 4 or more ACEs during their lifetime vs 10.6% of non-Medicaid, lower income youth. (Figure 18)
- Among all Ohio youth, 64.8% of Black or African American youth had ever experienced any ACE, compared to 50.3% of white youth, and 60.3% of Hispanic youth. (Figure 21)





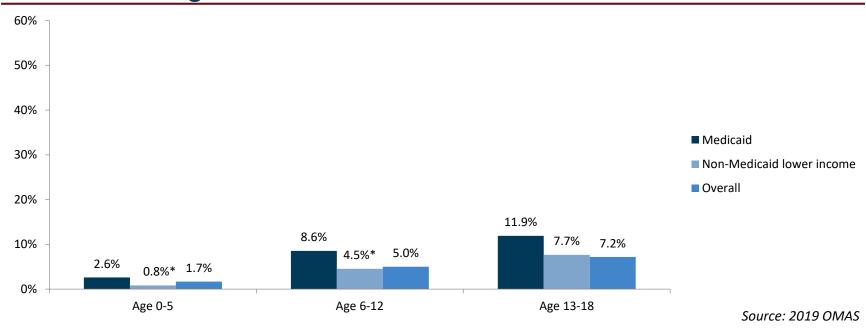
Figure 9. Ever had a Parent/Guardian Divorced or Separated among all Ohio Youth, by Income/Insurance Status & Age



The percent who had experienced a divorced or separated parent was higher among Medicaid-enrolled and older youth. For Medicaid-enrolled children ages 0 to 5, over 30% had experienced parental divorce or separation. Among Medicaid-enrolled youth ages 13 to 18, 58.0% had experienced this event.



Figure 10. Ever had a Parent/Guardian die among all Ohio Youth, by Income/Insurance Status & Age



The percent who had experienced the death of a parent or guardian was higher among Medicaid-enrolled and older youth. Parental death was a rare event for the youngest children (ages 0 to 5). Among Medicaid-enrolled older youth, 8.6% of 6- to 12-year-old youth and 11.9% of 13- to 18-year-old youth had experienced parental death.

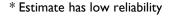
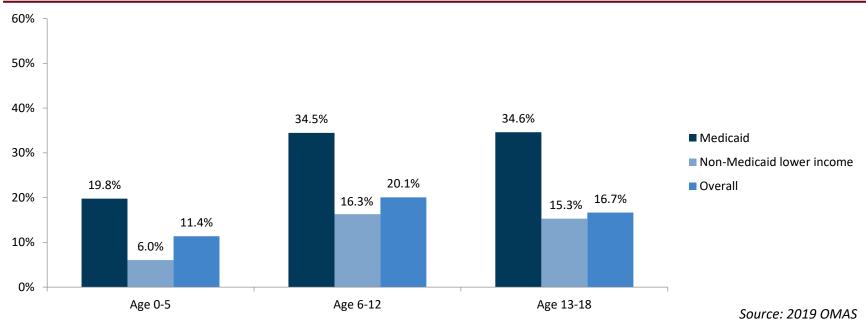




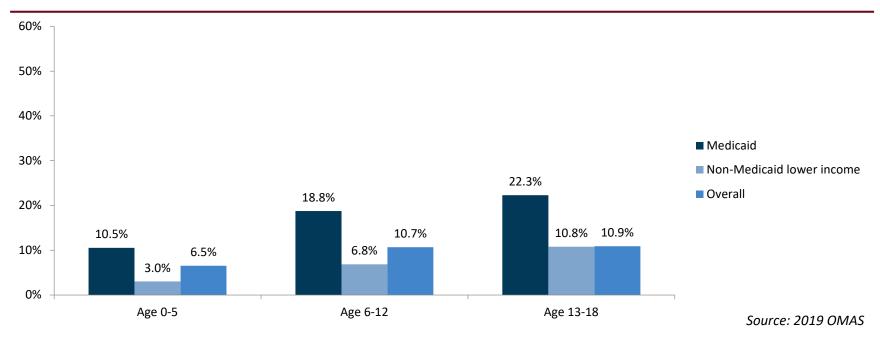
Figure 11. Ever had a Parent/Guardian Incarcerated among all Ohio Youth, by Income/Insurance Status & Age



Medicaid-enrolled youth were more likely to have experienced parental incarceration. Among Medicaid-enrolled young children (ages 0 to 5), nearly 20% had experienced parental incarceration while nearly 35% of Medicaid-enrolled older youth (ages 6 to 18) had experienced this event.



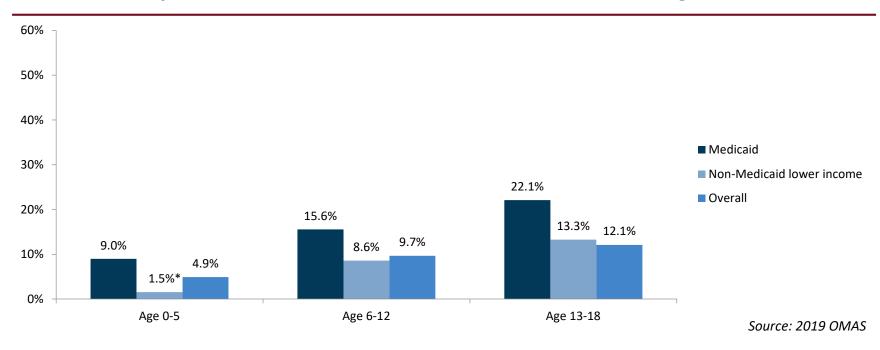
Figure 12. Ever Saw or Heard Parents/Adults Slap, Hit, Kick, Punch One Another in the Home among all Ohio Youth, by Income/Insurance Status & Age



Medicaid-enrolled youth were more likely to have witnessed parent/adult violence at home. Among Medicaid-enrolled young children (ages 0 to 5), over 10% had witnessed parental violence. Among Medicaid-enrolled youth ages 13 to 18, over 22% had witnessed parental violence. Across age categories, the percent who had witnessed parental violence was 2 to 3 times as high for Medicaid-enrolled youth by comparison with non-Medicaid lower-income youth.



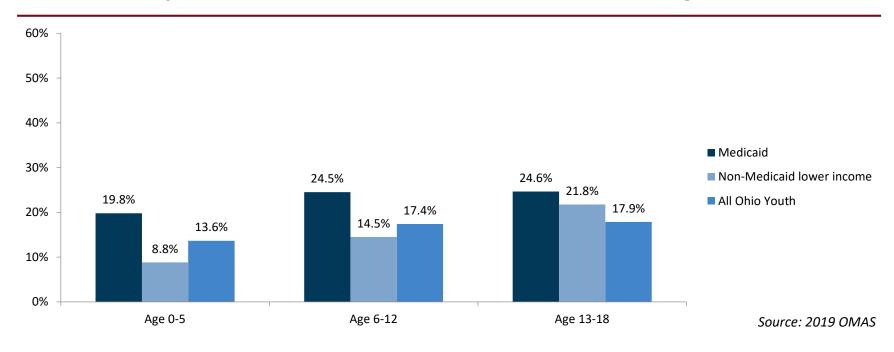
Figure 13. Ever Experienced or Witnessed Violence in the Neighborhood among all Ohio Youth, by Income/Insurance Status & Age



Medicaid-enrolled and older youth were more likely to have been a victim of, or witnessed, violence. Among Medicaid-enrolled youth ages 0 to 5, the percent exposed to violence was 9.0%. Among Medicaid-enrolled youth ages 13 to 18, the percent exposed to violence was 22.1%.



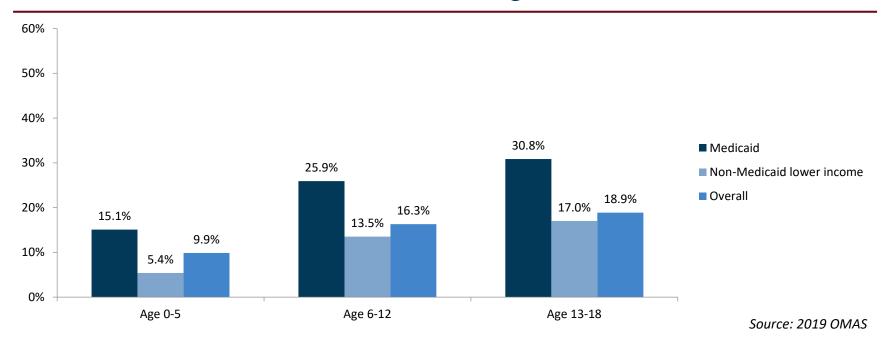
Figure 14. Ever Lived with Anyone Mentally III, Suicidal, or Severely Depressed among all Ohio Youth, by Income/Insurance Status & Age



Medicaid-enrolled youth ages 0-to12 were more likely to have experienced living with someone who is mentally ill, suicidal, or severely depressed. Among Medicaid-enrolled youth ages 0 to 5, the percent who had lived with someone with mental illness approached 20%. Among Medicaid-enrolled youth ages 6 to 18, the percent who had lived with someone with mental illness approached 25%, but did not vary across youth ages 6 to 12 or 13 to 18.



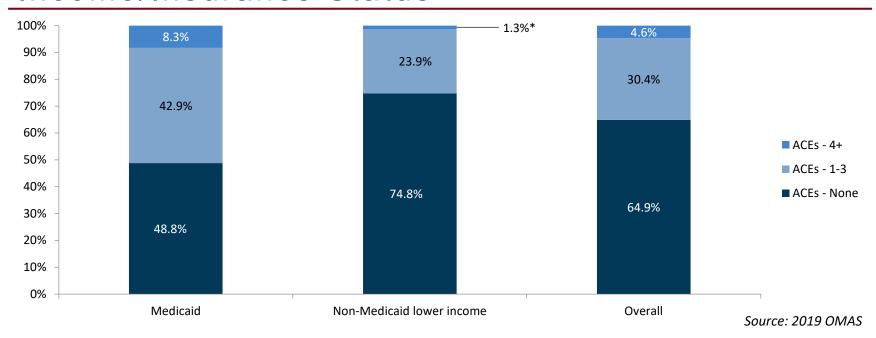
Figure 15. Ever Lived with Anyone who had a Problem with Alcohol among all Ohio Youth, by Income/Insurance Status & Age



Medicaid-enrolled and older youth were more likely to have experienced living with someone who had an alcohol problem. Among Medicaid-enrolled youth ages 0 to 5, the percent who had ever lived with someone with an alcohol problem was 15.1%. Among Medicaid enrolled youth ages 6 to 12, the percent was 25.9%. By ages 13 to 18, this figure is over 30%.



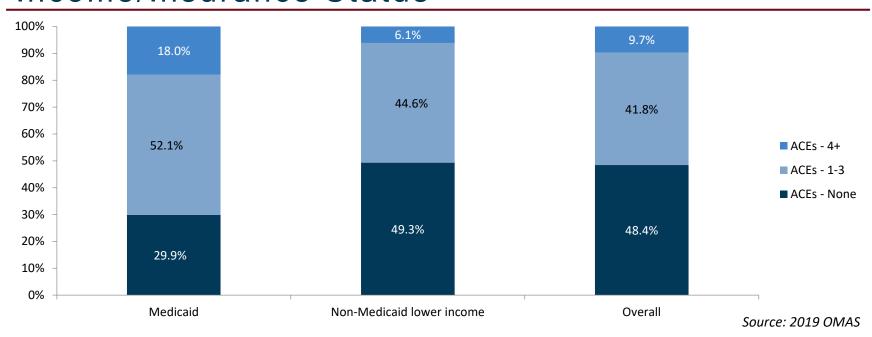
Figure 16. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Youth Ages 0-5, by Income/Insurance Status



Among Medicaid enrolled children ages 0 to 5, 51.2% had experienced at least one of the 8 adverse childhood experiences (ACEs) compared with roughly 25% of non-Medicaid lower-income 0 to 5-year-olds. Among Medicaid-enrolled children ages 0 to 5, 8.3% had experienced 4 or more ACEs in their lifetime.



Figure 17. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Youth Ages 6-12, by Income/Insurance Status

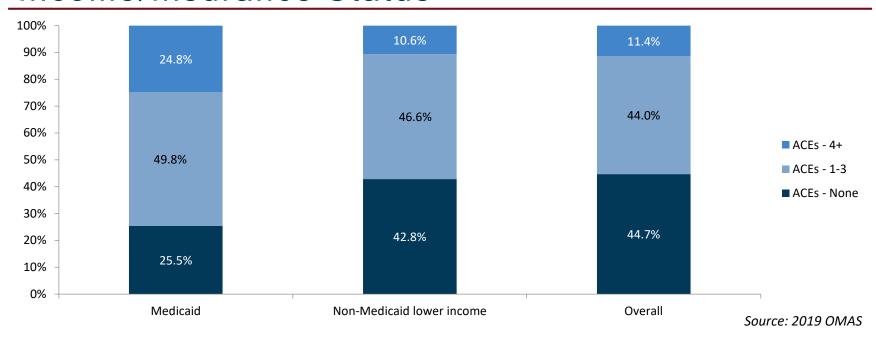


Among Medicaid-enrolled youth ages 6 to 12, 70.1% of had experienced at least one of the 8 adverse childhood experiences (ACEs); this proportion was 50.7% for non-Medicaid lower-income 6- to 12-year-olds. Among Medicaid-enrolled youth ages 6 to 12, 18.0% had experienced 4 or more ACEs in their lifetime.



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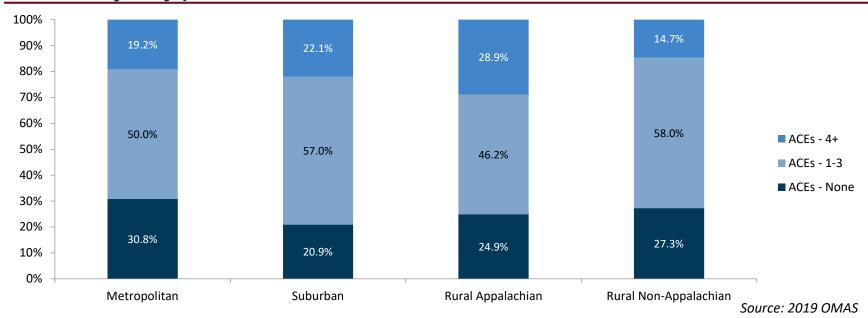
Figure 18. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Youth Ages 13-18, by Income/Insurance Status



Among Medicaid enrolled 13- to 18-year-olds, 74.5% had experienced at least one of the 8 ACEs, compared to 57.2% of non-Medicaid lower-income 13- to 18-year-olds. Among Medicaid-enrolled youth ages 13 to 18, nearly one-quarter (24.8%) had experienced 4 or more ACEs.



Figure 19. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Medicaid Youth ages 6-18, by County Type*



Among Medicaid-enrolled youth ages 6 to 18, youth from metropolitan counties were least likely to have experienced any adverse childhood experience (ACE) (69.2%) compared with rural Appalachian youth (75.1%), rural non-Appalachian youth (72.7%), and suburban youth (79.1%). Rural Appalachian youth were most likely to have experienced 4 or more ACEs (28.9%).

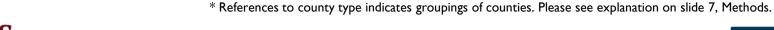
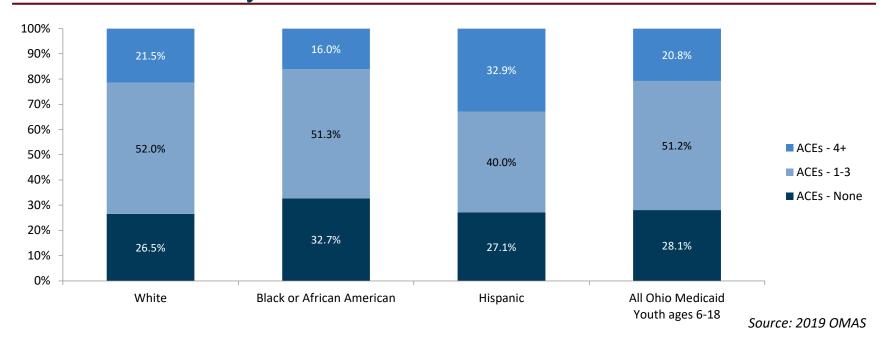




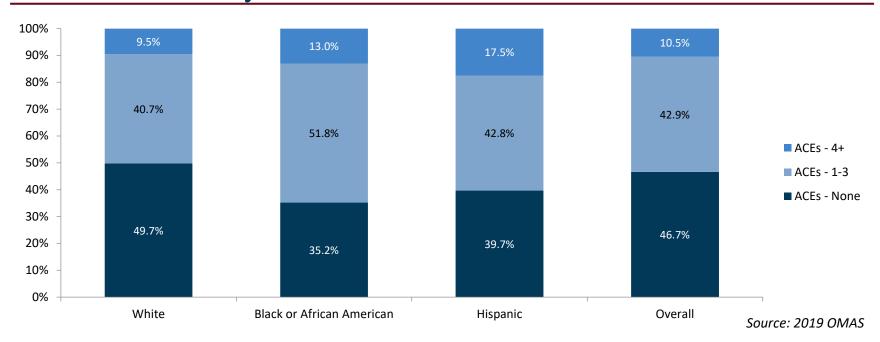
Figure 20. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Medicaid Youth Ages 6-18, by Race/Ethnicity



Of Black or African American youth, 67.3% had ever experienced any ACE compared to 73.5% of white youth, and 72.9% of Hispanic youth. Hispanic youth were most likely to have experienced 4 or more ACEs (32.9%).



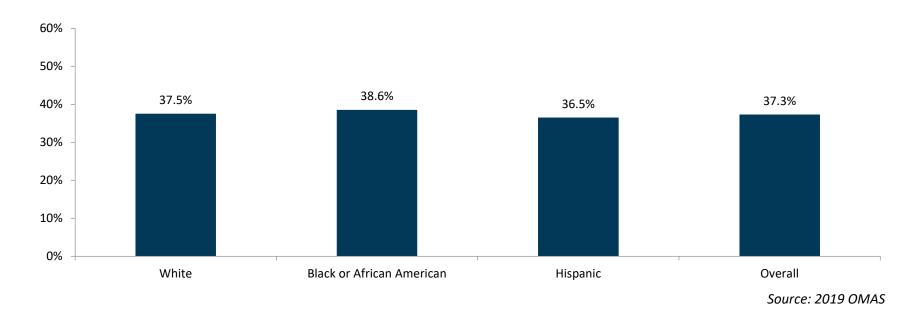
Figure 21. Percent Who Experienced 0, 1-3 or 4+ ACEs among Ohio Youth Ages 6-18, by Race/Ethnicity



Among all Ohio youth ages 6 to 18, Black or African American youth were most likely to have experienced any ACE. Of Black or African American youth, 64.8% had ever experienced any ACE compared to 50.3% of white youth, and 60.3% of Hispanic youth. Hispanic youth were most likely to have experienced 4 or more ACEs (17.5%).



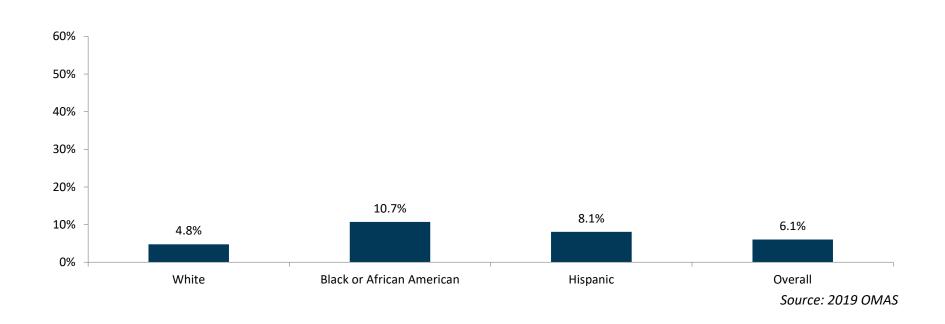
Figure 22. Ever had a Parent/Guardian Divorced or Separated among Ohio Youth Ages 6-18, by Race/Ethnicity



The percent of youth ages 6 to 18 who had ever experienced divorce or separation of a parent or guardian was comparable across race/ethnic groups.



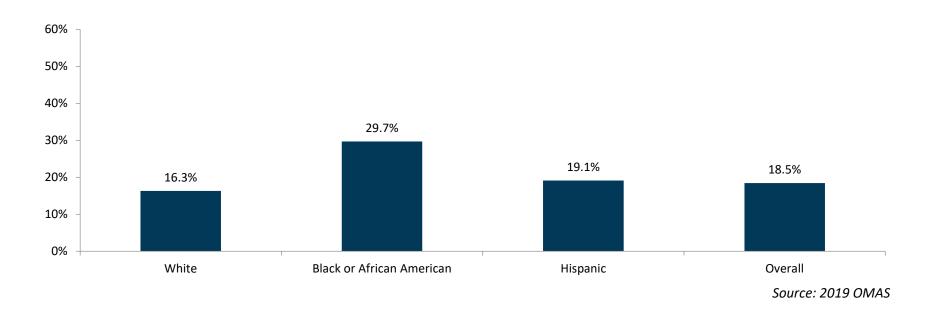
Figure 23. Ever had a Parent/Guardian Die among Ohio Youth Ages 6-18, by Race/Ethnicity



10.7% of Black or African American youth ages 6 to 18 had experienced the death of a parent or guardian compared with 4.8% of white and 8.1% of Hispanic youth.



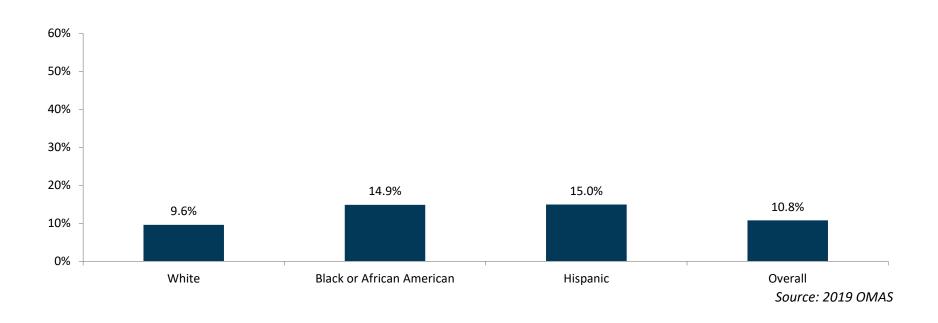
Figure 24. Ever had a Parent/Guardian Incarcerated among Ohio Youth Ages 6-18, by Race/Ethnicity



Of those ages 6 to 18, Black or African American youth were most likely to have ever had a parent or guardian incarcerated. 27.9% of Black or African American youth had ever experienced parental incarceration, compared to 16.3% of white and 19.1% of Hispanic youth.



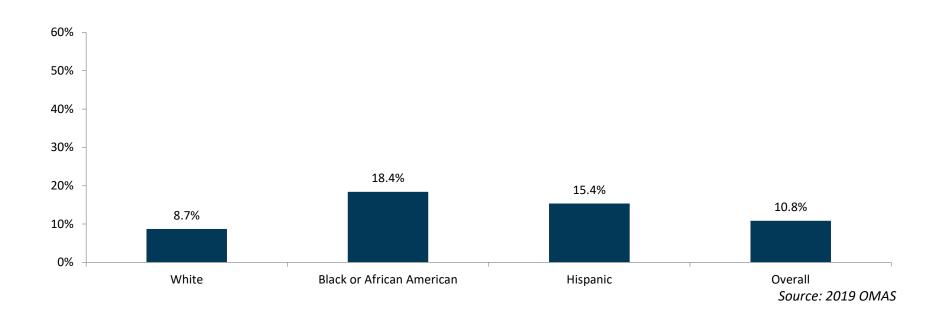
Figure 25. Ever Saw or Heard Parents/Adults Slap, Hit, Kick, Punch One Another in the home among Ohio Youth Ages 6-18, by Race/Ethnicity



15% of Black or African American and Hispanic youth ages 6 to 18 had ever seen or heard parents slap, hit, kick or punch one another in the home compared with 9.6% of white youth.



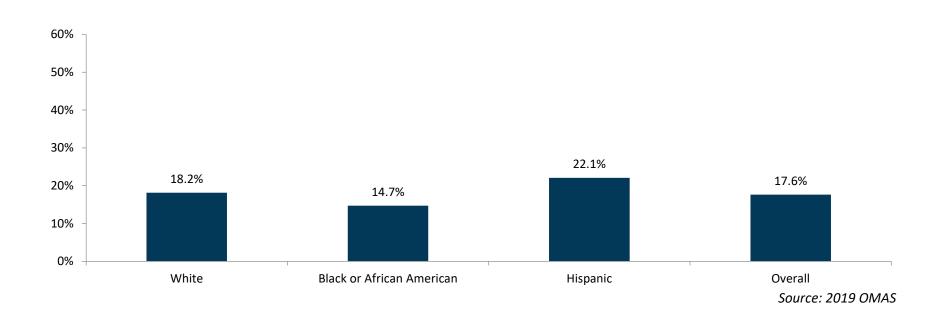
Figure 26. Ever Experienced or Witnessed Violence in the Neighborhood among Ohio Youth Ages 6-18, by Race/Ethnicity



18.4% of Black or African American youth ages 6 to 18 had experienced or witnessed violence compared with 15.4% of Hispanic youth and 8.7% of white youth.



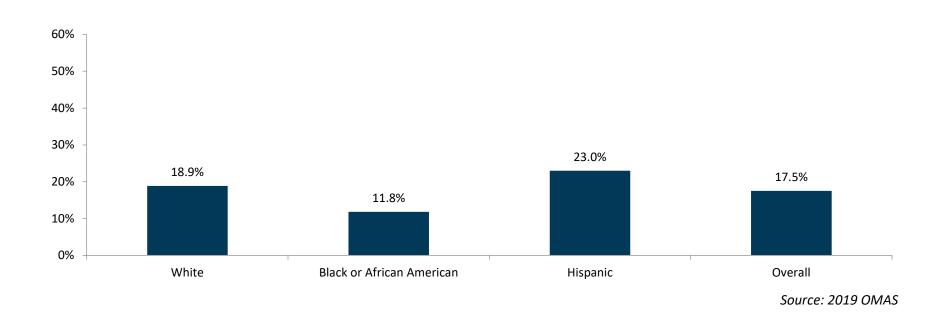
Figure 27. Ever Lived with Anyone Mentally III, Suicidal, or Severely Depressed among Ohio Youth Ages 6-18, by Race/Ethnicity



22.1% of Hispanic youth ages 6 to 18 had ever lived with anyone mentally ill, suicidal, or severely depressed compared with 18.2% of white youth and 14.7% of Black or African American youth.



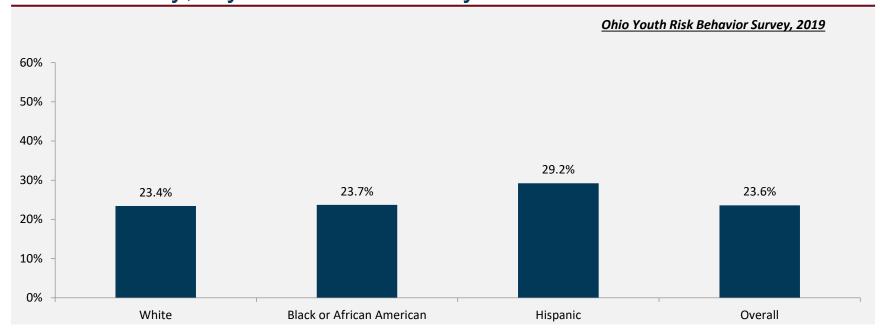
Figure 28. Ever Lived with Anyone who had a Problem with Alcohol among Ohio Youth Ages 6-18, by Race/Ethnicity



23.0% of Hispanic youth ages 6 to 18 had ever lived with anyone who had a problem with alcohol compared with 18.9% of white youth and 11.8% of Black or African American youth.



Figure 29. Percent of Ohio Middle School Students who Reported Someone Smoked Tobacco Products in Their Home While They Were There during the 7 Days Before the Survey, by Race/Ethnicity

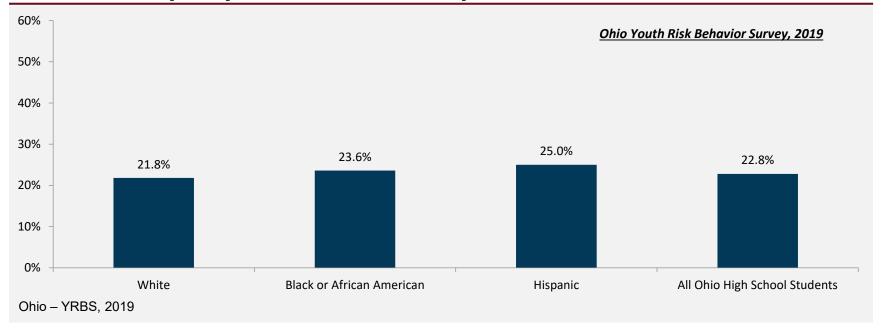


Ohio - YRBS, 2019

23.6% of Ohio middle school students reported that someone smoked tobacco products in their home while they were there, during the 7 days before the survey.



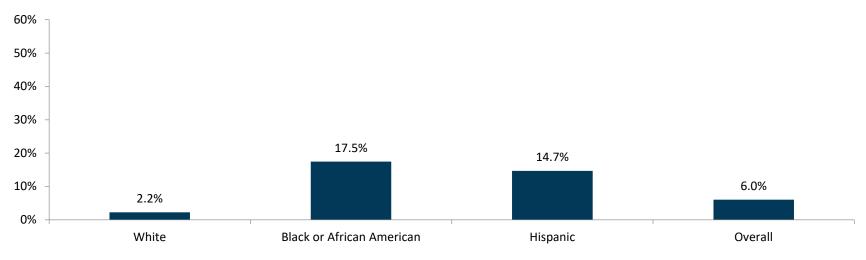
Figure 30. Percent of Ohio High School Students who Reported Someone Smoked Tobacco Products in Their Home While They Were There during the 7 Days Before the Survey, by Race/Ethnicity



22.8% of Ohio high school students reported that someone smoked tobacco products in their home while they were there, during the 7 days before the survey.



Figure 31. Ever Treated or Judged Unfairly because of Race/Ethnicity among Ohio Youth Ages 6 to 18, by Race/Ethnicity



Source: 2019 OMAS

Black or African American youth and Hispanic youth were more likely to report being treated or judged unfairly because of race/ethnicity (17.5% and 14.7%, respectively) by comparison with white youth (2.2%).



RESULTS: HEALTH OUTCOMES BY INCOME/INSURANCE STATUS BY AGE

This section describes the percent of Ohio youth experiencing poor/fair general health status, mental health impairment, obesity, and asthma; by insurance status and age.

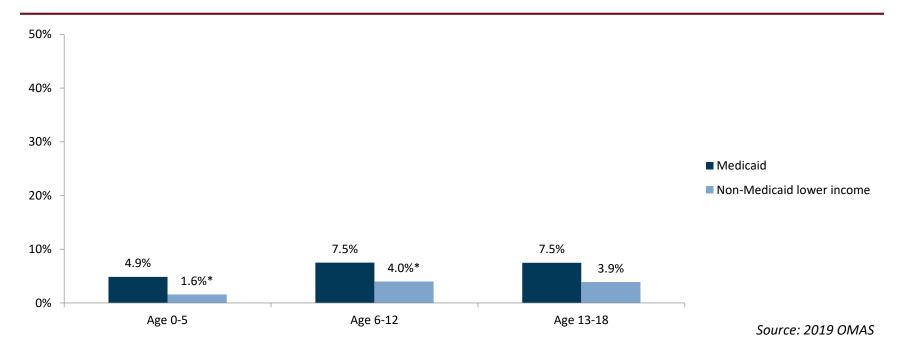
Key Findings: Health Outcomes by Income/Insurance Status by Age

- Fair or poor health status, mental health impairment, asthma, and obesity were more likely among Medicaid-enrolled youth than non-Medicaid, lower income youth. For example, for youth ages 13 to 18:
 - 7.5% of Medicaid enrolled youth were in fair or poor health vs 3.9% of non-Medicaid, lower income youth (Figure 32)
 - 9.0% of Medicaid enrolled youth experienced mental health impairment vs 5.5% of non-Medicaid, lower income youth (Figure 33)
 - 21.8% of Medicaid enrolled youth were obese vs 16.5% of non-Medicaid, lower income youth (Figure 34)
 - 24.1% of Medicaid enrolled youth had asthma vs 15.3% of non-Medicaid, lower income youth (Figure 35)
- Black or African American youth were more likely than white youth to be obese (31.4% vs 23.2%, <u>Figure 38</u>) or have asthma (24.4% vs 14.8%, <u>Figure 39</u>)





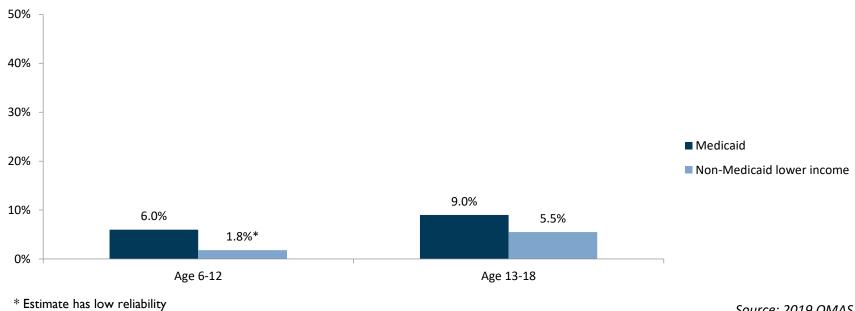
Figure 32. Fair or Poor General Health Status among all Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled youth were more likely to have fair or poor health status by comparison with non-Medicaid lower-income youth. Among Medicaid-enrolled youth ages 0 to 5, the rate of fair or poor health approached 5%. Among Medicaid-enrolled youth ages 6 to 18, 7.5% were in fair or poor health; this rate does not vary across youth ages 6 to 12 and 13 to 18.



Figure 33. Mental Health Impairment among all Ohio Youth Ages 6-18 with Household Income ≤ 206% FPL, by Income/Insurance Status & Age

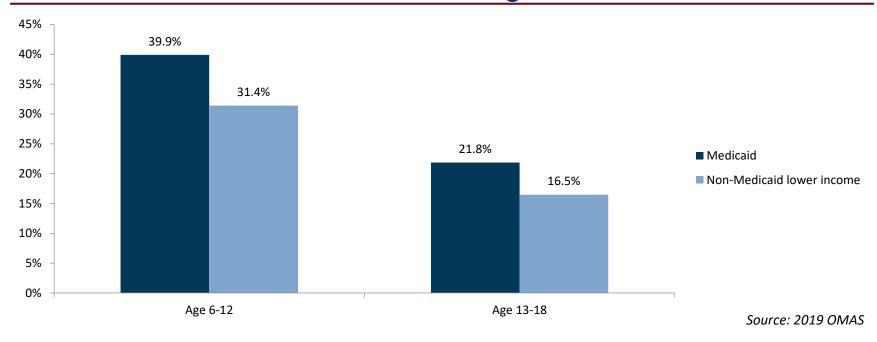


Source: 2019 OMAS

Medicaid-enrolled youth were more likely to have 7 or more days in the last month during which their functioning was impaired due to mental health problems compared to non-Medicaid lower-income youth. Among Medicaidenrolled youth ages 6 to 12, 6% exhibited mental health impairment in the last month compared with 9% of Medicaid-enrolled youth ages 13 to 18.



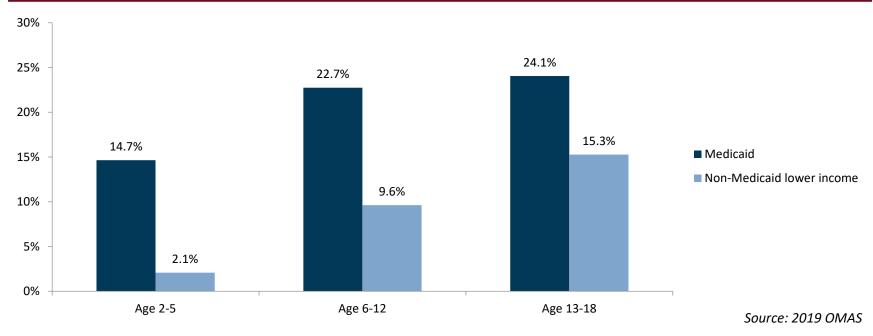
Figure 34. Obesity among Ohio Youth Ages 6-18 with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled and younger youth were more likely to be obese. Medicaid-enrolled youth ages 6 to 12 were more likely to be obese (39.9%) than non-Medicaid lower-income youth (31.4%). Medicaid-enrolled youth ages 13 to 18 were more likely to be obese (21.8%) compared to non-Medicaid lower-income youth (16.5%).



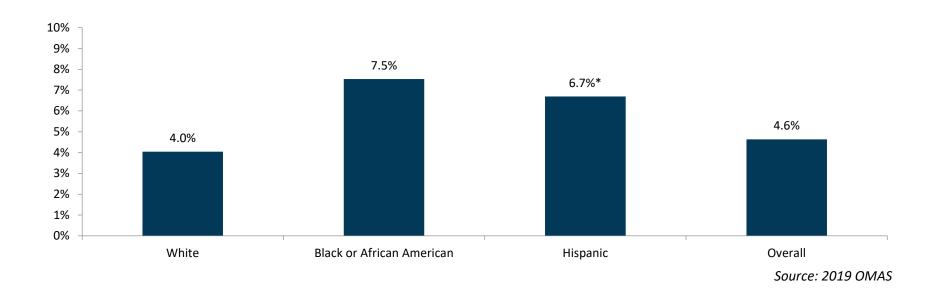
Figure 35. Asthma among Ohio Youth Ages 2-18 with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled youth were substantially more likely to have ever received an asthma diagnosis, by comparison with non-Medicaid lower-income. Among Medicaid-enrolled youth ages 0 to 5, 11.7% had asthma. For Medicaid-enrolled youth ages 6 to 12 and 13 to 18, asthma rates were 22.7% and 24.1%, respectively.



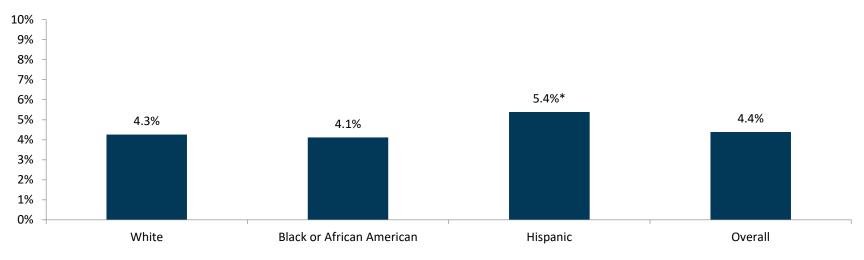
Figure 36. Fair or Poor General Health Status among Ohio Youth Ages 6 to 18, by Race/Ethnicity



Of youth ages 6 to 18, 7.5% of Black or African American youth were in fair or poor health compared with 6.7% of Hispanic youth and 4.0% of white youth.



Figure 37. Mental Health Impairment among Ohio Youth Ages 6 to 18, by Race/Ethnicity

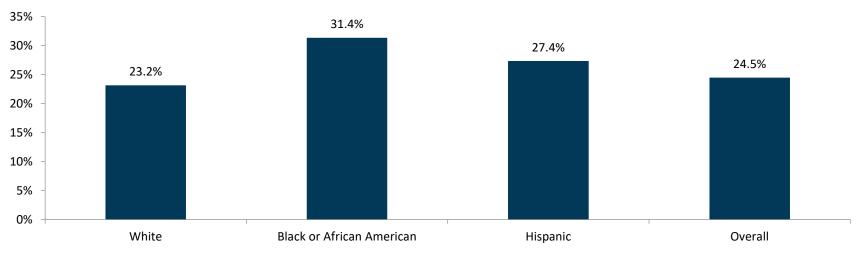


Source: 2019 OMAS

For youth ages 6 to 18, mental health impairment varied minimally across race/ethnic groups.



Figure 38. Obesity among Ohio Youth Ages 6 to 18, by Race/Ethnicity

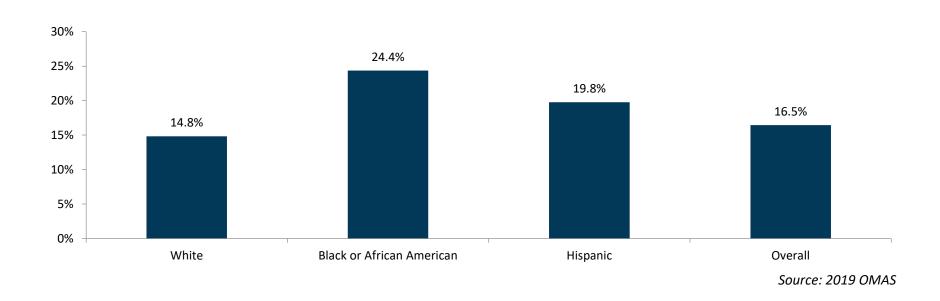


Source: 2019 OMAS

31.4% of Black or African American youth were obese compared with 27.4% of Hispanic youth and 23.2% of white youth.



Figure 39. Asthma among Ohio Youth Ages 6 to 18, by Race/Ethnicity



24.4% of Black or African American youth had asthma compared with 19.8% of Hispanic youth and 14.8% of white youth.



RESULTS: HEALTH OUTCOMES BY INCOME/INSURANCE STATUS, COUNT OF ACES, AND AGE

This section describes the association of ACEs with mental health impairment, obesity, and asthma. It also describes how these associations vary by insurance status and age group.

Key Findings: Health Outcomes by Income/Insurance Status, Count of ACEs, & Age

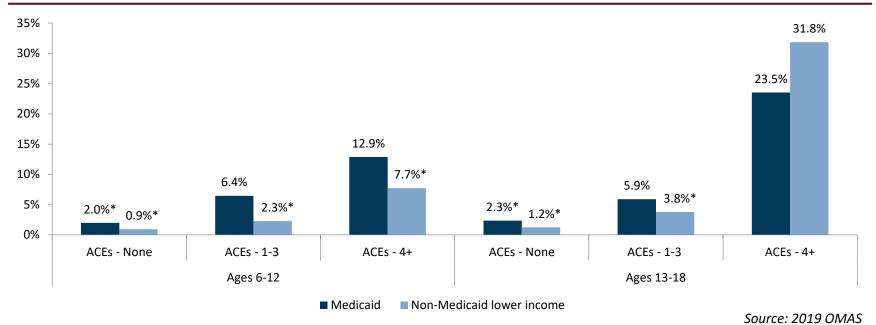
- Overall, for 6 to 18-year-old youth, mental health impairment, obesity, and asthma* were more prevalent – this section addresses this age grouping.
- ACEs were associated with mental health impairment among lowerincome youth, regardless of age group or Medicaid status.
 - For example, among Medicaid-enrolled youth ages 13 to 18, 23.5% of those with 4 or more lifetime ACEs experienced mental health impairment vs. 2.3% of those with no lifetime ACEs (Figure 40)
- ACEs were associated with asthma among Medicaid youth.
 - For example, among Medicaid-enrolled youth ages 13 to 18, 31.2% of those who
 with 4 or more ACEs had asthma vs 10.6% of those with no lifetime ACEs. (Figure 42)

* Outcomes with sufficiently high reliability for analysis





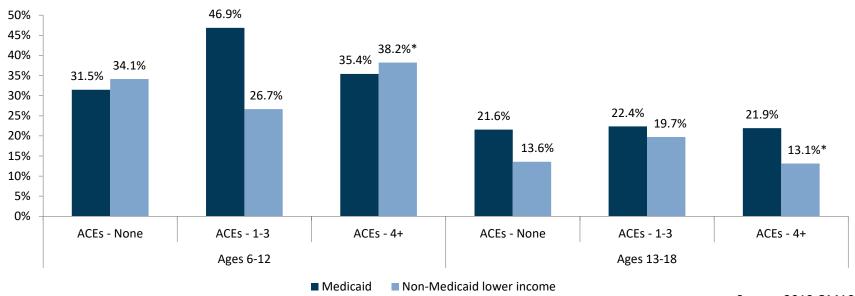
Figure 40. Mental Health Impairment among Ohio Youth Ages 6-18 with Household Income ≤ 206% FPL, by Income/Insurance Status, Count of ACEs, & Age



Among Medicaid-enrolled youth ages 6 to 18, more adverse childhood experiences (ACEs) is associated with higher rates of mental health impairment. Among Medicaid-enrolled 6- to 12-year-olds who have experienced no ACEs, 2.0% had impaired mental health in the last month, compared to 12.9% of those who have experienced 4 or more ACEs. Among Medicaid-enrolled 13- to 18-year-olds who have experienced no ACEs, 2.3% had impaired mental health in the last month, compared to 23.5% of those who experienced four or more ACEs.



Figure 41. Obesity among Ohio Youth Ages 6-18 with Household Income ≤ 206% FPL, by Income/Insurance Status, Count of ACEs, & Age



Source: 2019 OMAS

For Medicaid-enrolled and younger (ages 6 to 12 years) youth, those who had any adverse childhood experiences (ACEs) had higher rates of obesity (although the highest rate is observed for those youth who experience 1 to 3 ACEs. For Medicaid-enrolled youth ages 13 to 18, the percent obese is comparable across ACEs count groups.

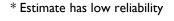
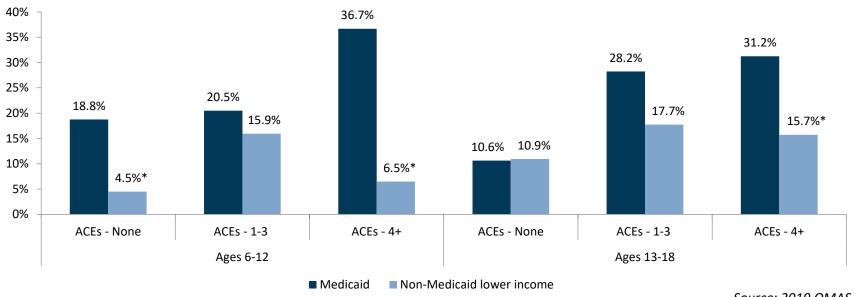




Figure 42. Asthma among Ohio Youth Ages 6 to 18 with Household Income ≤ 206% FPL, by Income/Insurance Status, Count of ACEs, & Age



Source: 2019 OMAS

For Medicaid-enrolled youth ages 6-18, those with more lifetime adverse childhood experiences (ACEs) had higher rates of asthma. Among Medicaid-enrolled youth ages 6 to 12 who had experienced no ACEs, 18.8% had asthma compared with 36.7% of those who have experienced 4 or more ACEs. Among Medicaid-enrolled youth ages 13 to 18, comparable figures were 10.6% and 31.2%.



RESULTS: HEALTH CARE UTILIZATION BY INCOME/INSURANCE STATUS BY AGE

This section describes how Ohio youths' health care utilization varies by insurance status and age.

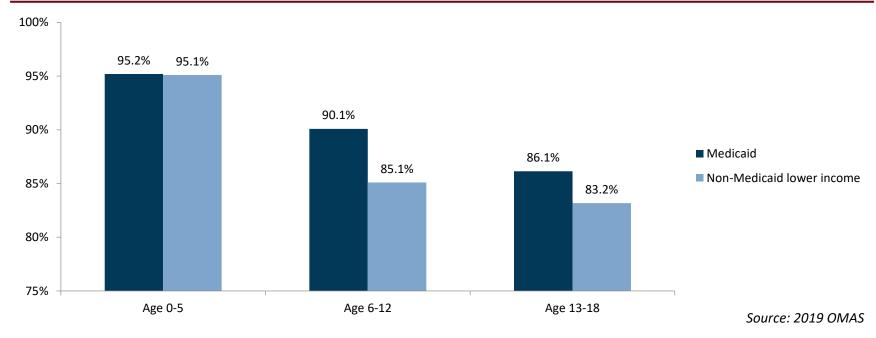
Key Findings: Health Care Utilization by Income/Insurance Status by Age

- Though having a higher prevalence of various health problems, when compared to non-Medicaid lower-income youth, Medicaidenrolled youth were generally as or more likely to utilize health services – including routine check-ups, dental visits, but also emergency room visits.
 - For Medicaid and non-Medicaid lower-income children ages 0 to 5, roughly 95% had a routine check-up in the last year. (Figure 43)
 - 86.1% of Medicaid enrolled youth ages 13 to 18 had a routine check-up vs.
 83.2% of non-Medicaid lower income youth (Figure 43)
 - Among Medicaid-enrolled children ages 0 to 5, 8.7% used emergency departments frequently (3 or more times in the past year) compared with 3.9% of non-Medicaid lower-income youth (Figure 45)





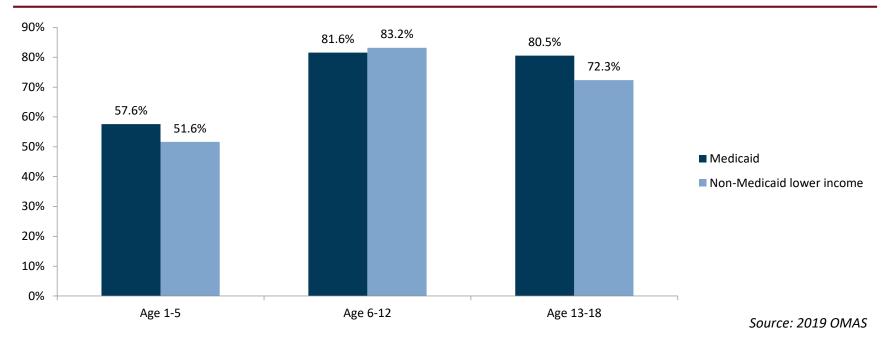
Figure 43. Had a Routine Check-Up in the Past Year among Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



For Medicaid and non-Medicaid lower-income youth ages 0 to 5, roughly 95% had a routine check-up in the last year. Older youth were less likely to have had a routine check-up, with adolescent youth ages 13 to 18 being least likely.



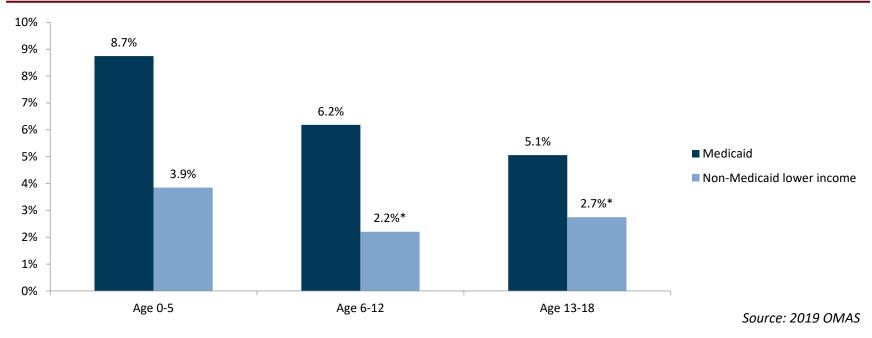
Figure 44. Had a Dentist Visit in the Past Year among Ohio Youth Ages 1-18 with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Young children ages 1 to 5 were less likely than older children to have had a dental visit in the past year. The percent of Medicaid-enrolled youth ages 13 to 18 who had a dental visit in the past year was 80.5% compared to 72.3% of non-Medicaid lower-income youth.



Figure 45. Frequent (3+/year) Emergency Department Visits among Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Among Medicaid-enrolled children ages 0 to 5, 8.7% used emergency departments frequently compared with 3.9% of non-Medicaid lower-income youth ages 0 to 5. Among Medicaid-enrolled youth ages 13 to 18, 5.1% used emergency departments frequently.



RESULTS: UNMET NEEDS BY INCOME/INSURANCE STATUS BY AGE

This section describes how Ohio youths' unmet health care needs vary by insurance status and age.

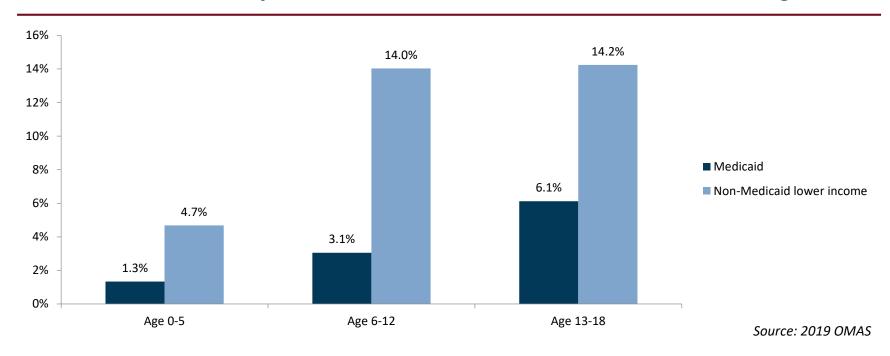
Key Findings: Unmet Needs by Income/Insurance Status by Age

- Compared to non-Medicaid lower-income youth, Medicaidenrolled youth were less likely to delay or avoid care in the past year and were more likely to find accessing medical care easier, compared with three years ago.
 - Among Medicaid enrolled youth ages 13 to 18, 6.1% of youth delayed or avoided care compared to 14.2% of non-Medicaid lower-income youth (Figure 46)
 - Among Medicaid enrolled youth ages 6 to 18 with any health condition (fair/poor health, impaired mental health, obesity, or asthma), 5.2% delayed or avoided care in the past year compared to 16.2% of non-Medicaid, lower-income youth (Figure 47)
- Medicaid-enrolled youth were generally as likely as non-Medicaid lower-income youth to have unmet dental (<u>Figure 50</u>) and mental health (<u>Figure 51</u>) needs.
 - Among Medicaid enrolled youth ages 13 to 18, 6.7% had unmet mental health needs vs 6.0% of non-Medicaid, lower income youth (Figure 51)





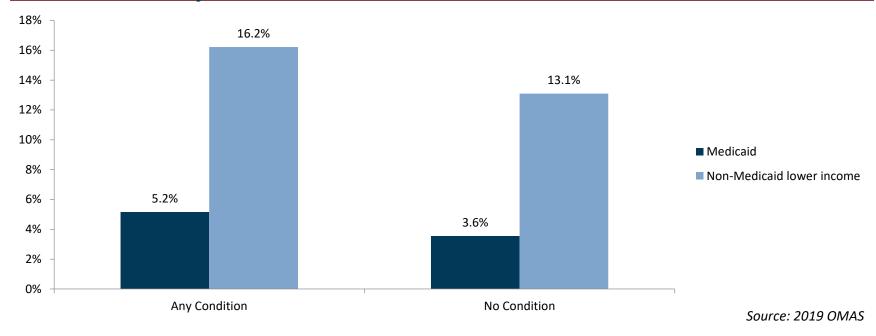
Figure 46. Percent who Delayed or Avoided Care in the Past Year among Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled and younger youth were less likely to delay or avoid care in the past year compared to other insurance status groups and older children. Among Medicaid youth ages 0 to 5, 1.3% delayed or avoided care compared to 4.7% of non-Medicaid lower-income children ages 0 to 5. Among Medicaid enrolled youth ages 13 to 18, 6.1% of youth delayed or avoided care compared to 14.2% of non-Medicaid lower-income youth.



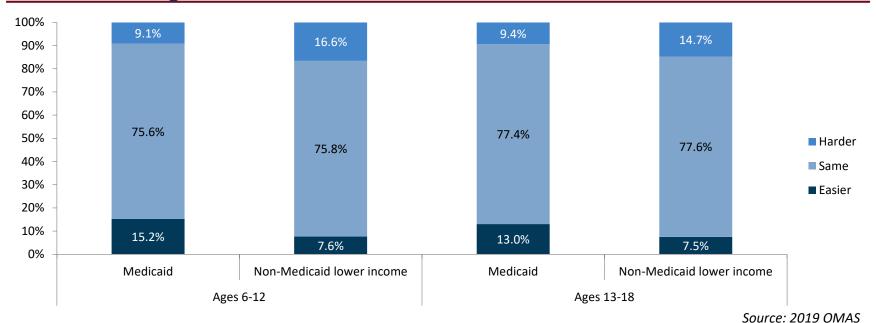
Figure 47. Percent who Delayed or Avoided Care in the Past Year among Ohio Youth Ages 6-18 Years with Household Income ≤ 206% FPL, by Income/Insurance Status & Any Health Condition



The percent of Medicaid-enrolled youth with any health condition (fair/poor health, impaired mental health, obesity, or asthma) who delayed or avoided care in the past year was lower (5.2%) compared to non-Medicaid, lower-income youth (16.2%).



Figure 48. Change in Ease of Accessing Medical Care Compared to 3 years ago among Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age

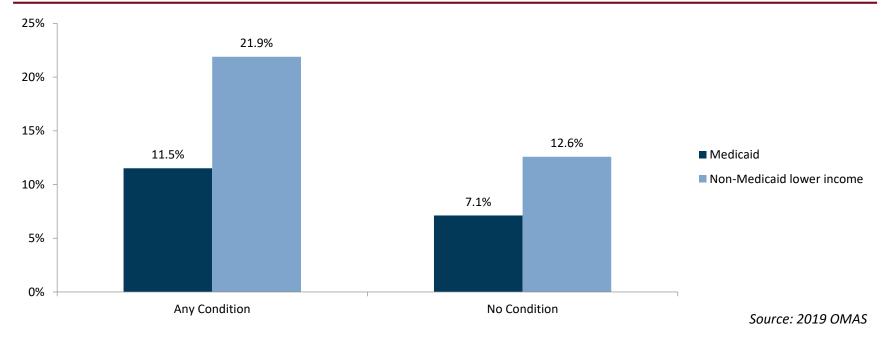


For both age groups, Medicaid-enrolled youth were more likely to find accessing medical care easier compared with three years ago than non-Medicaid, lower-income youth. Medicaid-enrolled youth were also less likely to

experience more difficulty accessing medical care compared with three years ago than non-Medicaid, lower-income youth.



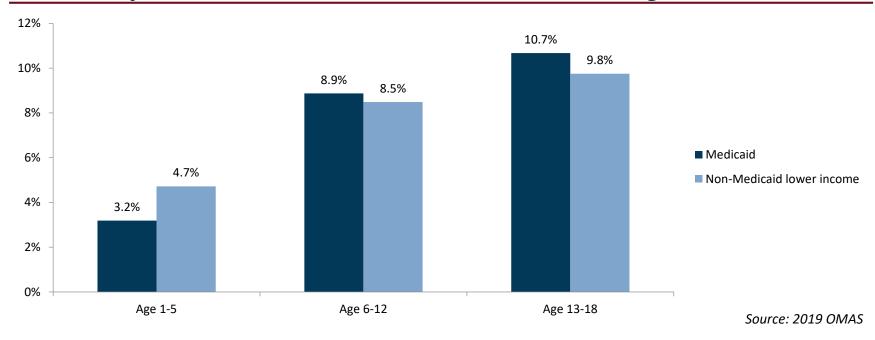
Figure 49. Increased Difficulty Accessing Medical Care Compared to 3 Years Ago among Ohio Youth Ages 6 to 18 Years with Household Income ≤ 206% FPL, by Income?Insurance Status & Any Health Condition



The percent of Medicaid-enrolled youth with any health condition (fair/poor health, impaired mental health, obesity, or asthma) who had more difficulty accessing medical care compared to three years ago was lower (11.5%) than the percent of non-Medicaid, lower-income youth (21.9%).



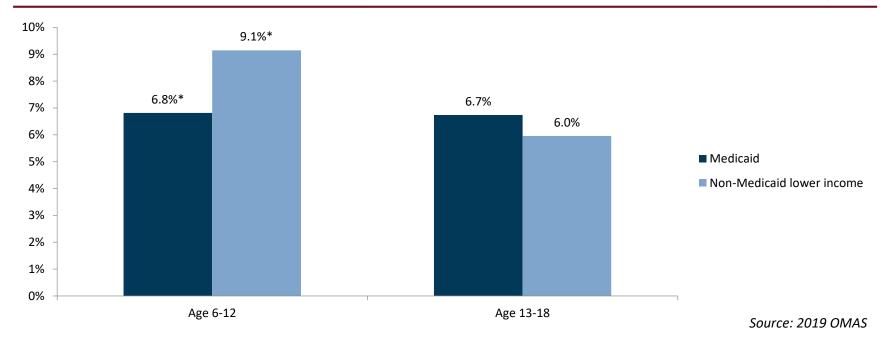
Figure 50. Percent with Unmet Dental Needs among Ohio Youth with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled youth ages 6 to 12 and 13 to 18 had similar levels of unmet dental health needs compared to non-Medicaid, lower-income youth in the past year.



Figure 51. Percent with Unmet Mental Health Needs among Ohio Youth Ages 6-18 Years with Household Income ≤ 206% FPL, by Income/Insurance Status & Age



Medicaid-enrolled youth ages 6 to 18 and non-Medicaid, lower-income youth ages 13 to 18 had similar levels of unmet mental health needs in the past year (6-7%). Of non-Medicaid lower-income youth, 9.1% had unmet mental health needs in the past year.



SUMMARY OF RESULTS

Medicaid enrollment. was most common among youth who are:

Younger. Overall, 48.6% of youth ages 0 to 5, 44.8% of 6- to 12-year-olds, and 34.7% of 13- to 18-year-olds were Medicaid enrolled.

Black or African American. Among lower-income youth, 78.9% of Black or African American youth were enrolled in Medicaid, compared to 67.1% of white youth and 65.9% of Hispanic youth.

Living in rural Appalachian counties. Nearly three quarters (74.3%) of youth in rural Appalachian counties were enrolled in Medicaid.

Adverse childhood experiences (ACEs) were more prevalent among Medicaid-enrolled youth. Compared to non-Medicaid lower-income adolescents, Medicaid youth were more likely to have experienced:

- A parent or guardian divorce or separation (37.1% vs. 58.0%);
- A parent or guardian incarcerated (15.8% vs. 34.6%);
- Living with someone with an alcohol problem (17.6% vs. 30.8%); and
- Living with someone who was mentally ill (20.4% vs. 24.6%).
 They were also more likely to be exposed to multiple ACEs.

In addition, among all Ohio youth, ACEs are more common among Black or African American youth compared to white youth.

ACEs may help explain why worrisome health outcomes were more prevalent among Medicaid-enrolled youth. Compared to non-Medicaid lower-income youth, Medicaid youth were more likely to be in fair or poor health status, to be obese, and to have mental health impairment or asthma. Some of this difference is attributable to the higher prevalence of ACEs among Medicaid-enrolled youth. For example, among Medicaid-enrolled youth ages 13 to 18 who had not experienced any ACEs, 2.3% had mental health impairment compared to 22.8% of those with 4 or more ACEs. Similarly, among Medicaid-enrolled youth ages 13 to 18 who had not experienced any ACEs, 10.6% had asthma compared to 31.2% of those with 4 or more ACEs.

Health care access was often easier for Medicaid-enrolled youth. Compared to non-Medicaid lower-income youth, Medicaid youth were more likely to utilize health services such as routine check-ups and dental visits, but also emergency room visits. Medicaid-enrolled youth also were less likely to delay or avoid care or to report that accessing health care was more difficult today compared to three years ago. They were also no more likely than non-Medicaid lower-income youth to report unmet health care needs (with the exception of dental health needs.) This similarity is noteworthy, given the higher rate of health problems among Medicaid-enrolled youth.



POLICY CONSIDERATIONS

Adverse Childhood Events may have a powerful effect on Medicaid children's health

Adverse Childhood Events (ACEs) were strongly associated with asthma and mental health impairment (MHI) and other health outcomes. Their greater prevalence among Medicaid youth suggest that ACEs may help explain why worrisome health outcomes were more prevalent in this population. Similarly, their heightened prevalence among Black or African American youth suggest that ACEs contributed to racial/ethnic disparities in health outcomes.

Medicaid is serving a high need population

Medicaid is serving a population of children with considerable health needs. Many of these problems were not caused by Medicaid but may stem from the powerful ACEs they have experienced. This suggests that health needs lead to Medicaid enrollment rather than vice versa. In other words, many lower-income families enroll in Medicaid precisely because of their children's health needs.

Yet Medicaid youth experience comparable or better access to health care.

Despite their greater health needs, Medicaid youth had an easier time accessing health care compared to other youth from lower-income families. For lower-income families, Medicaid played a critical role in providing children with access to care.

Given their powerful association with key children's health outcomes, ACEs merit further attention for research and intervention. Policymakers might consider new efforts to screen for ACEs, as new efforts intended to help Medicaid children may have a limited effect so long as ACEs are not addressed.

Medicaid is more valuable than ever for lower income families. As insurance providers have struggled to serve lower-income families, they have had to limit coverage as well as increase premiums and co-pays. For children, especially those with special health care needs, employer-sponsored insurance may be disappearing as a viable or affordable option for lower-income working parents. Thus, policymakers might consider the implications of Medicaid becoming indispensable as the only real option for lower-income families.

COVID-19.

Although the OMAS survey was conducted prior to the COVID-19 pandemic, key findings such as the prevalence of ACEs and their associations with key health outcomes (including mental health) may have implications for conditions during and after the pandemic. Economic hardship and other pandemic-related distress may increase exposure to ACEs that could result in immediate and longer-term effects on children's health.



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ACKNOWLEDGEMENTS



Ohio Department of Medicaid

Mike DeWine, Governor Jon Husted, Lt. Governor Maureen Corcoran, Director









Department of Mental Health and Addiction Services

