

**THE RACIAL EQUITY PROJECT**

Young Children's Health and  
Health Care Equity in Colorado

Findings from the National Survey of Children's Health

*Laura Freeman Cenegy, Ph.D.*

*Courtney Thornton*

November 2023



**EARLY MILESTONES**  
COLORADO

---

ADVANCING OPPORTUNITIES FOR CHILDREN'S SUCCESS

# Table of Contents

- Introduction..... 2
- Key Findings..... 3
- Data Summary ..... 4
  - Health Care Use..... 4
  - Screening Rates ..... 6
  - Health Care Affordability ..... 8
  - Health Insurance Coverage..... 10
  - Health Status..... 11
  - Health Risk & Protective Factors ..... 12
- Appendix .....17

## Acknowledgments

This report was made possible by funding support from Gary Community Ventures.

## The Racial Equity Project

This report is part of a new research initiative at Early Milestones Colorado – The Racial Equity Project. Colorado’s early childhood policies and investments continue to improve, but how well does the state deliver on providing the resources for all children to thrive? The Racial Equity Project aims to examine equity among children from different racial and ethnic backgrounds in Colorado along several important life domains, beginning with children’s health and well-being, and their early care and education. The goal is to identify where inequities exist and inform efforts to better meet the needs of children across the state.

## Introduction

This report examines health and health care inequities between the two most populous race/ethnic groups of young children (ages 0 to 8) in Colorado – white and Latino children. While there are efforts underway within Colorado to address health-related inequities largely among adults<sup>i</sup>, this report centers on equity issues among the very youngest Coloradans. We know that racial and ethnic inequities exist in terms of maternal and infant health, and uninsurance rates among children<sup>1</sup>. We lack important information, however, about the community-specific barriers that prevent many young children from accessing routine health care and living the healthiest possible childhoods.

We begin to address this gap using data from the National Survey of Children’s Health (NSCH) from 2016 to 2021<sup>2</sup>. We ask, specifically, do young white and Latino children in Colorado have similar health outcomes, access to health care, and exposure to health-promoting resources?

### Terminology

We use the term “Latino” to refer to children whose parents and guardians indicated “Yes” to the following survey question: “Is this child of Hispanic, Latino, or Spanish origin?” We carefully considered what term to use to refer to children within this community. On the one hand, we, as researchers, are obligated to represent the data as it was collected. But we also acknowledge that the findings presented in this report come from a survey funded and directed by the federal government and administered by the U.S. Census Bureau. The race and ethnicity questions posed by the U.S. Census Bureau result in institutional categories that often fail to align with the ways communities define themselves<sup>3</sup>. Therefore, on the other hand, we considered how this diverse community in Colorado most commonly defines itself. Other more gender-inclusive alternatives were proposed, such as “Latine” or “Latinx”. We ultimately decided to use the term “Latino” because of concerns that the alternatives were not widely recognized among the community members to whom they refer<sup>4</sup>. Going forward, we welcome input from community members about how they want to be represented in future research.

### The Kids We Can’t See

Roughly 13% of Colorado’s children are identified by their parents and guardians as something other than white or Latino<sup>5</sup>. There were extremely limited numbers of these children in the NSCH data. We cannot draw conclusions about children for whom we have only a handful of cases to represent. For this reason, we were not able to include these children in this report. Doing so would misrepresent these children and their families. We hope to call attention to this lack of data and encourage future efforts to collect more data from racially and ethnically diverse populations.

---

<sup>i</sup> See, for example: the Colorado Department of Public Health and Environment’s Office of Health Equity and the Colorado Department of Health Care Policy & Financing’s Health Equity Plan.

## Key Findings

- Latino children are less likely to visit a primary care doctor but are more likely to visit an emergency room.
- Screening rates are low among young children in Colorado overall.
- Latino families spend less but struggle more to afford their children's health care costs.
- Health insurance coverage type differs between white and Latino children. Most Latino children are covered by Medicaid or Child Health Plan Plus (CHP+) and most white children are covered by employer-based insurance.
- Latino children's families experience more economic hardship than white children's families, with almost one in four reporting frequent difficulty covering basic expenses like food and housing.
- White and Latino children benefit from similarly high levels of neighborhood amenities.
- Latino children's parents and guardians were more likely than white children's to express concerns about the safety of their neighborhoods.

# Data Summary

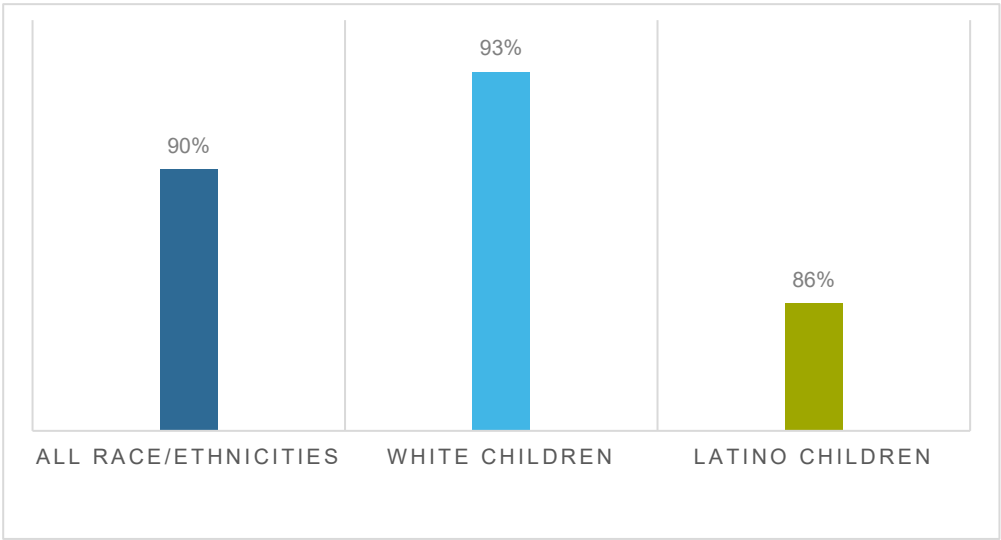
## Health Care Use

All children should regularly see a doctor whether they are sick or not. Routine checkups are important for tracking children’s health and development, receiving preventative health care (such as immunizations), and for promptly identifying concerns and treating issues when they arise. The American Academy of Pediatrics recommends that children have a total of 12 well-child visits from birth to age three, and once a year thereafter<sup>6</sup>. According to these recommendations, all children in Colorado between the ages of 0 and 8 should have seen a doctor or health professional at least once within the last year.

From 2016 to 2021, 90% of all Colorado children between the ages of 0 to 8 were reported by their parents and guardians to have seen a doctor, nurse, or other health professional for some reason within the last year. That means that 1 in 10 children overall ages 0 to 8 in Colorado had no health care visits – checkups or otherwise – within the last year. Latino children were more likely to have no reported health care visits compared to white children. Specifically, 14% of Latino children and 7% of white children did not see a health professional for any reason within the last year. That amounts to many young children across Colorado each year who are missing out on important preventative health care services, and possibly also forgoing needed health care when they are sick or injured.

***Latino children were less likely to have seen a doctor, nurse, or other health professional for any reason within the last year compared to white children.***

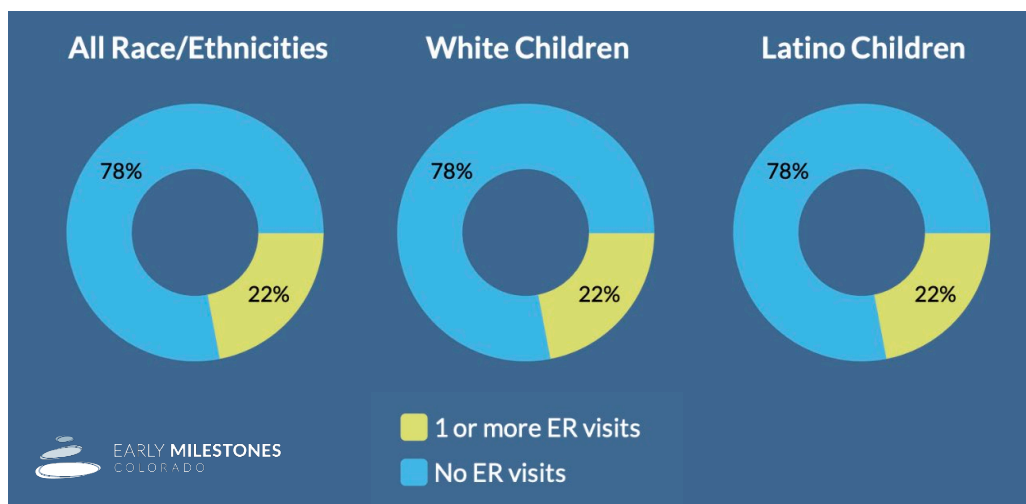
**FIGURE 1. Percent of Colorado Children Ages 0 to 8 Who Saw a Doctor, Nurse, or Health Professional for Any Reason Within the Last Year**



During the same period from 2016 to 2021, 22% of all children in Colorado ages 0 to 8 visited a hospital emergency room (ER) at least once during the prior year. That figure is lower than the estimated one-third of young children nationally who visited the ER in 2020, which was a dramatic decline from previous years<sup>7</sup>. Even so, young Latino children in Colorado were

significantly more likely than their white counterparts to visit the ER. According to their parents and guardians, 28% of young Latino children in Colorado visited the ER at least once within the previous year, compared to 17% of young white children. These trends are similar to those among adults across the U.S.<sup>8</sup> These trends in ER usage may reflect differences in where white and Latino communities choose to access health care, as well as community-specific barriers to accessing primary care. Immigration status, for example, may compel some Latino families to avoid a traditional doctor’s office and opt instead to go to the ER when their children are sick<sup>9</sup>.

**FIGURE 2. Percent of Colorado Children Ages 0 to 8 Who Visited the Hospital Emergency Room within the Last Year**



Having a health care home (also referred to as a medical home<sup>10</sup>) is important for children’s health because it increases access to and use of pediatric health care services and is associated with better health outcomes for children<sup>11</sup>. A health care home does not have to be a single place. A health care home may consist of one or more places where families with children can access preventative, primary, and specialty care services. The important thing is that families with children know where to go to access health care—for check-ups, sick visits, vaccines, and care for special needs and chronic conditions. A primary care provider (often referred to as a PCP) may also be part of the health care home. This may be a doctor, nurse, or other health professional who serves as a child’s pediatrician. Having a primary care provider is important because it encourages families to take their children in for routine preventative care<sup>12</sup>. These providers are also important sources for accurate health-related information, such as about childhood immunizations<sup>13</sup>.

The NSCH asks three questions related to health care homes for children: whether children have a usual place to go for health care (1) when they are sick, (2) when they need routine preventative care, and (3) if they have a personal doctor or nurse who serves as their primary health care provider.

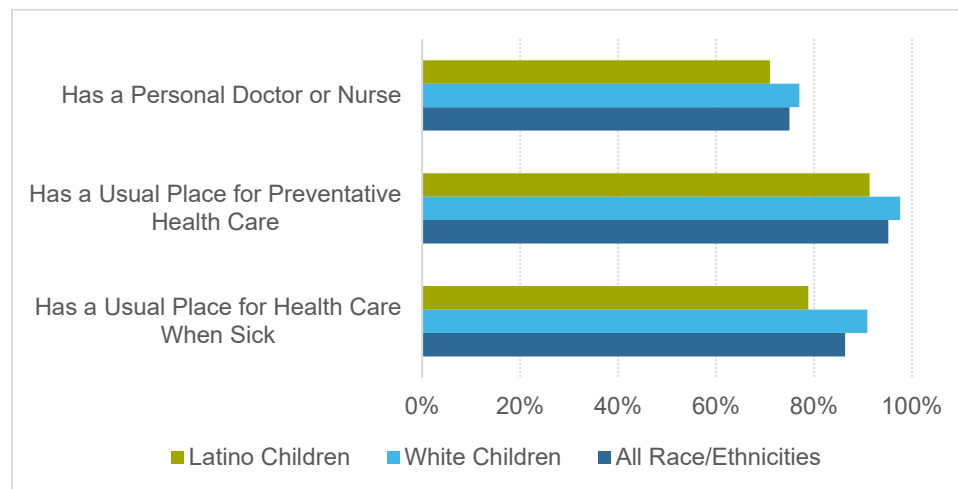
Among children ages 0 to 8 in Colorado from 2016 to 2021, 86% of children overall had a usual place to go for health care when they were sick. However, fewer Latino children (79%) relative to white children (91%) had a usual place to go for sick visits. On the other hand, the vast majority of Colorado children overall (95%) had a place to go for preventative health care. Again, there were significant differences by race and ethnicity, as fewer Latino children (91%) relative to white

children (98%) had a place to go for preventative care. That means that nearly 1 in 10 young Latino children in Colorado lacked a place to go for routine check-ups, vaccines, developmental screenings, and other important preventative health care services.

In terms of having a personal doctor or nurse, the numbers were slightly lower among children overall and by race and ethnicity. Parents and guardians reported that only 75% of Colorado children overall had a personal doctor or nurse. That number was lower among Latino children relative to white children, as 71% of Latino children had a personal doctor or nurse, compared to 77% of white children.

**Latino children were less likely to have a health care home compared to white children.**

**FIGURE 3. Health Care Homes, Percent of Colorado Children Ages 0 to 8 With a Personal Doctor or Nurse, a Usual Place for Preventative Health Care, and a Usual Place for Health Care When Sick**



**Screening Rates**

Regular screening and surveillance are important for early detection of developmental delays and access to early intervention services. The American Academy of Pediatrics recommends that developmental surveillance occur at every check-up throughout early childhood and that formal developmental screening occur three times before a child turns three years old<sup>6</sup>.

It's important to note that screening and surveillance differ. Formal screening occurs when children's parents or guardians are asked to complete questionnaires about their children's health and development. These questionnaires should be given during children's health visits at specific ages—such as 9-, 18-, and 30-months to identify general developmental delays, for example<sup>6</sup>. Surveillance, however, does not involve the use of formal screening tools (such as questionnaires), but rather happens when clinicians track children's developmental progress in a variety of ways. Some key ways clinicians may do this is by asking children's parents and guardians if they have concerns about their children's development or behavior, for example, and by simply observing the child during their visit.

The NSCH asks parents and guardians about the following related to their child’s screening and surveillance: (1) whether their child’s doctor (or health professional) asked them if they had concerns about their child’s development, learning, or behavior (i.e., surveillance), (2) whether they were given a questionnaire about concerns related to their child’s development, communication, or social behavior (i.e., screening), and (3) whether the child had their vision tested<sup>ii</sup>.

Parents and guardians reported low levels of screening and surveillance among Colorado children across all three measures between 2016 to 2021. In terms of formal screening, only half of the parents and guardians of all Colorado children ages 0 to 5 were reportedly given a questionnaire regarding their child’s developmental, communication, or behavior observations. In terms of vision screening, only 55% of all Colorado children ages 0 to 8 had their vision tested—ever, for children ages 0 to 5, or within the last two years for children ages 6 to 8. There were no significant differences in any of the above screening estimates for white and Latino children.

***According to their parents and guardians, only half of Colorado children were reportedly screened for developmental, communication, or behavior problems<sup>iii</sup>.***



However, doctors were less likely to ask parents and guardians of Latino children if they had concerns about their child’s development, learning, or behavior compared to white children’s parents and guardians. Only 28% of parents and guardians of Latino children were asked about these concerns relative to 38% of white children’s parents and guardians. This means that more developmental, communication, and behavior problems may be missed among Latino children in Colorado. In addition, these results suggest that many children’s health care providers are failing to ask these questions of parents and guardians as standard practice at every child check-up.

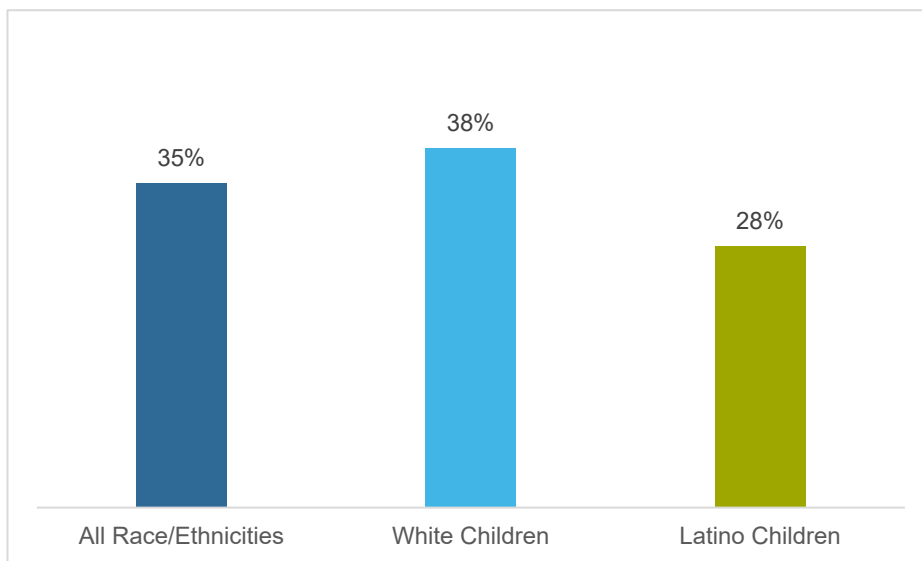
<sup>ii</sup> This question was asked differently for children ages 0 to 5 and 6 to 8. For children ages 0 to 5, parents and guardians were asked if their child had ever had their vision tested. For children ages 6 to 8, parents and guardians were asked if their child had their vision tested within the last two years.

<sup>iii</sup> The survey asks specifically, “During the past 12 months, did a doctor or other health care provider have you or another caregiver fill out a questionnaire about observations or concerns you may have about this child’s development, communication, or social behaviors? Sometimes a child’s doctor or other health provider will ask a parent to do this at home or during a child’s visit.”



**Doctors were less likely to ask parents and guardians of Latino children if they had concerns about their child's development, learning, or behavior.**

**FIGURE 4. Percent of Colorado Children Ages 0 to 8 Whose Doctor Asked Their Parent or Guardian About Any Concerns Regarding Their Child's Learning, Development, or Behavior**



### **Health Care Affordability**

Ensuring that children receive the health care they need means making it affordable for their families. Health care costs in Colorado have been rising in recent years<sup>14</sup>, including out-of-pocket costs paid by individuals<sup>15</sup>. However, there is no commonly agreed-upon understanding on what is affordable in terms of children's health care costs for families.

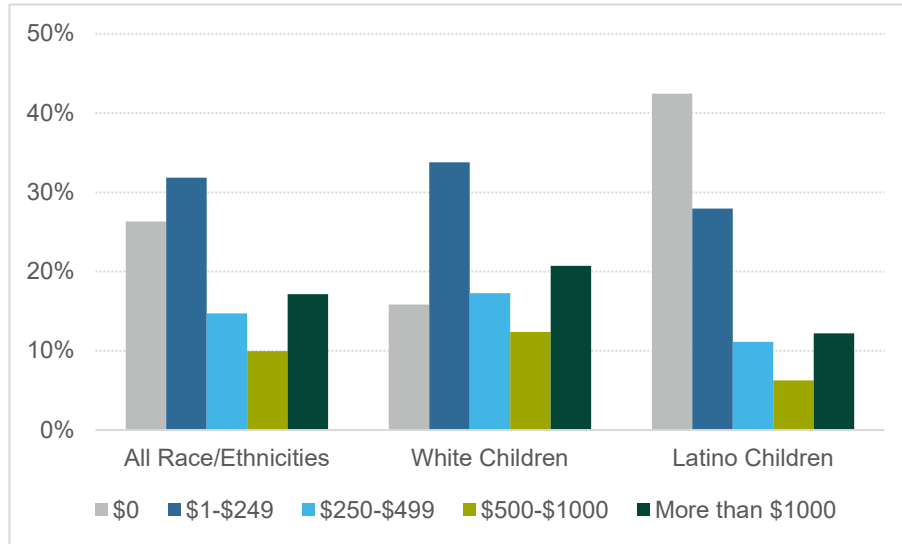
The NSCH asks parents and guardians to estimate the total amount they paid for their child's medical, health, dental, and vision care within the last year (excluding insurance premiums and other costs reimbursed by insurance). These estimated dollar amounts are grouped into categories ranging from nothing to more than \$1,000. It's important to note that the estimated costs paid are for a single child, rather than the total costs paid for all children within a family.

Among Colorado children ages 0 to 8 overall between 2016 to 2021, roughly one in four children's families paid no out-of-pocket costs within the last year for their child's health care. Roughly one in three children's families paid an out-of-pocket amount of less than \$250. Whereas another 17% of families paid out-of-pocket costs over \$1,000 for their child's health care in the previous year.

Reported out-of-pocket spending on children's health care was lower among families of Latino children relative to families of white children. For example, 42% of Latino children's parents and guardians reported no out-of-pocket health care costs in the previous year compared to only 16% of white children. On the other hand, almost twice as many white children's families spent more than \$1,000 on their child's health care in the past year compared to Latino children's families.

**Compared to white children’s families, Latino children’s families spent less on their child’s health care within the last year.**

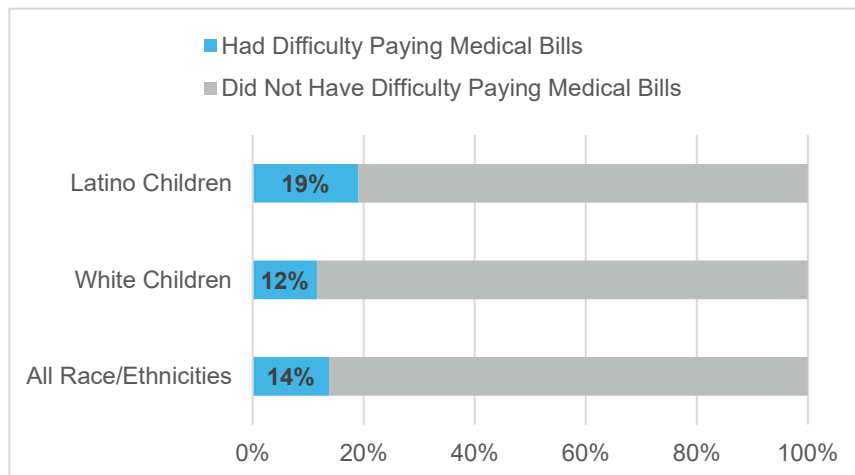
**FIGURE 5. Estimated Out-of-Pocket Health Care Costs for One Child Within the Last 12 Months, Colorado Children Ages 0 to 8**



Even though families of Latino children were more likely to have paid less for their children’s health care within the last year, they were also more likely to report difficulty affording the health care costs they incurred. Almost one in five families of Latino children (19%) reported difficulty paying their child’s medical bills within the last year compared to 12% of white children’s families. Paying their child’s medical bills was difficult for 14% of Colorado children’s families overall. Families that spent more than \$1,000 in the previous year on their child’s health care were more likely to report difficulty affording those costs.

**Compared to white children’s families, Latino children’s families were more likely to have difficulty paying their child’s medical bills within the last 12 months.**

**FIGURE 6. Percent of Colorado Families with Children Ages 0 to 8 Who Reported Difficulty Paying Their Child’s Medical Bills Within the Last 12 Months**

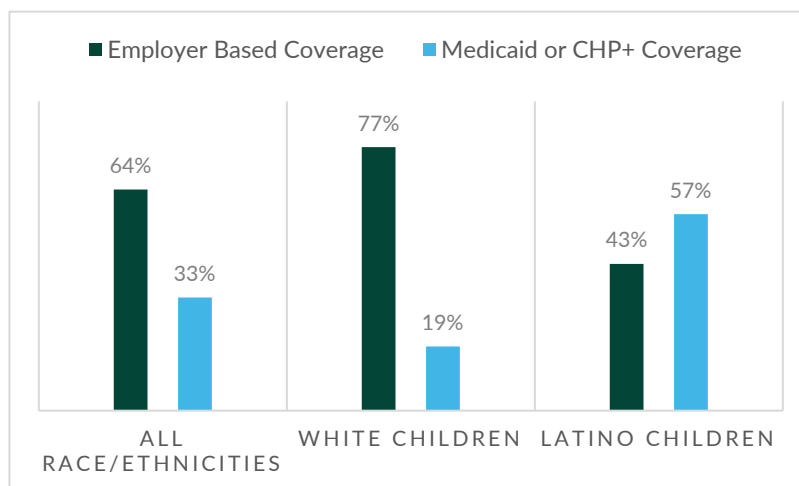


## Health Insurance Coverage

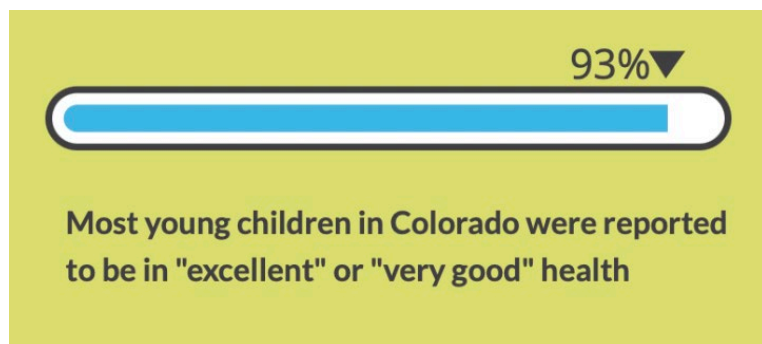
Most children in the U.S. are covered under some form of health insurance<sup>16</sup>. In Colorado, approximately 50% of children are covered under employer-based coverage, and more than a third are covered by Medicaid, Child Health Plan + (CHP+), or some other public insurance program<sup>17</sup>. Complete and continuous coverage is important for the overall health and well-being of children and helps increase the utilization of preventative care<sup>18</sup>. Job instability, increased coverage costs, and the removal of the continuous coverage mandate that had protected Coloradans served by Medicaid or CHP+ since the beginning of the COVID-19 pandemic from administrative disenrollments<sup>19</sup> can impact the ability of Colorado children to receive the timely care they need.

***Most white children had employer-based health insurance coverage, whereas the majority of Latino children were covered by Medicaid or CHP+.***

FIGURE 7. Health Insurance Coverage Type for Colorado Children Ages 0 to 8



Most white children ages 0 to 8 in Colorado from 2016 to 2021 (77%) had employer-based health insurance coverage. The number of Latino children with employer-based coverage was significantly lower at 43%. Just over half of Latino children (57%) were covered by Medicaid or CHP+. These differences in coverage type are important to be aware of because changes to Medicaid and CHP+ will have an outsized impact on Latino children within the state. Similarly, as employer-based coverage costs increase<sup>20</sup>, these higher costs will disproportionately impact white families with children in Colorado.



***According to their parents and guardians, 93% of children overall had coverage that usually met that child's needs.***

## Health Status

The NSCH poses a series of questions to capture children’s general physical and oral health status. First, the survey asks parents and guardians to rate the general condition of their child’s health on a five-point scale. This question is often used in health surveys because it is easy to ask and is considered a reasonable assessment of a child’s general health status. This question is commonly dichotomized to compare children reported to be in “excellent” or “very good” health to those in “good”, “fair”, or “poor” health. Children in the latter category are in poorer health, as there are generally very few children in the U.S. whose health is rated lower than “very good”<sup>21</sup>.

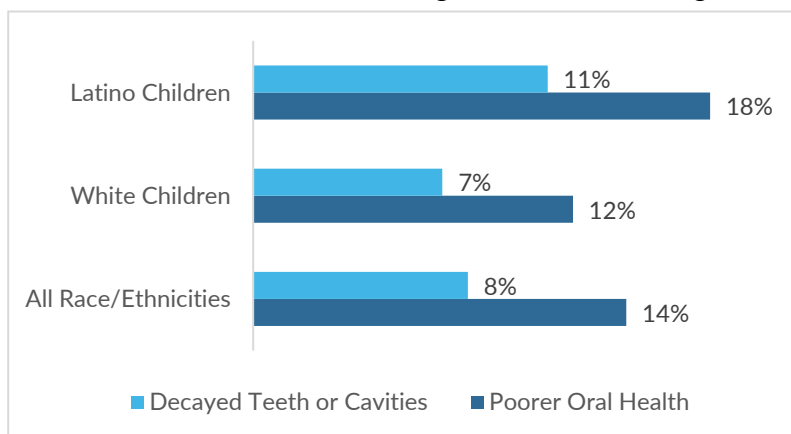
Overall, only 94% of children ages 0 to 8 in Colorado were reported to be in “excellent” or “very good” health between 2016 to 2021. Latino children were marginally less likely to be reported in “excellent” or “very good” health (93%) compared to white children (95%).

According to parents and guardians, oral health was an issue for roughly one in seven Colorado children ages 0 to 8. Approximately 86% of all Colorado children were reported to have “excellent” or “very good” oral health, compared to 14% of children whose oral health was rated lower<sup>iv</sup>. The differences in oral health between white and Latino children in Colorado were also greater than for overall physical health. Oral health was rated less than “excellent” or “very good” among 18% of Latino children compared to 12% of white children. Moreover, a larger percentage of Latino children (11%) had frequent or chronic difficulty with decayed teeth and cavities compared to white children (7%). These trends suggest a significant amount of need exists for oral health care among young children in Colorado, and especially among young Latino children.

In terms of oral health, the NSCH asks parents and guardians to report on the following two questions: 1) the overall condition of their child’s teeth, and 2) whether their child has had frequent difficulty with decayed teeth or cavities within the last year.

***Compared to white children, Latino children were less likely to have “excellent” or “very good” oral health, according to their parents and guardians, and more likely to have chronic cavities.***

**FIGURE 8. Oral Health Status Among Colorado Children Ages 0 to 8**



<sup>iv</sup> Parent-rated oral health is dichotomized such that poor oral health indicates the condition of a child’s teeth was reported as good, fair, or poor, as compared to very good or excellent.

## Health Risk & Protective Factors

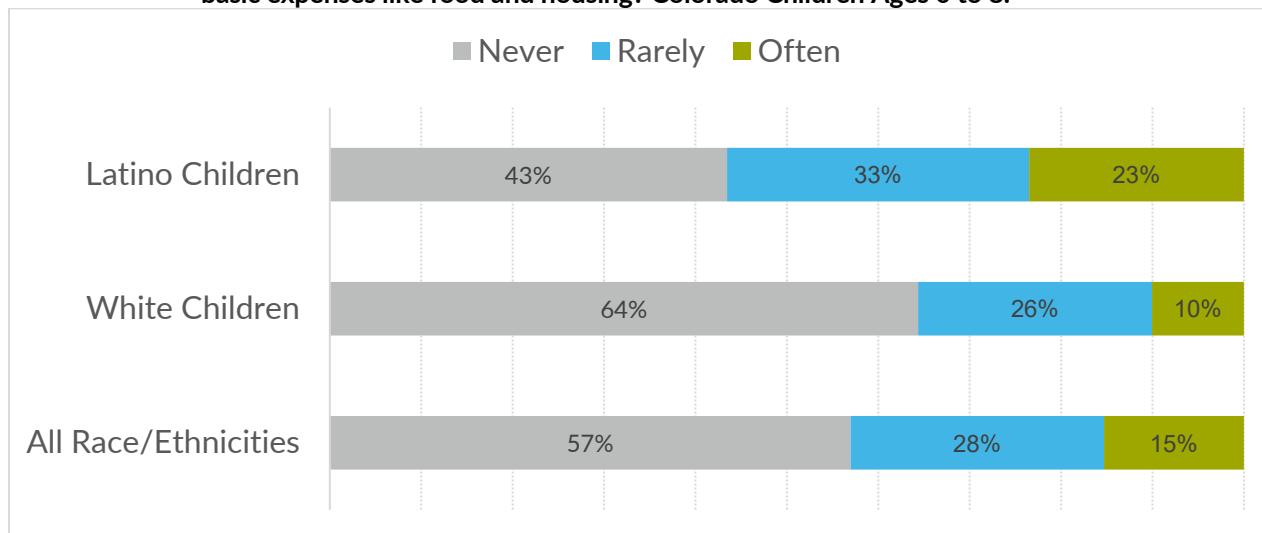
Access and exposure to health-promoting resources is uneven among children throughout the United States<sup>22</sup>. Children born into families and communities with less wealth and fewer resources are exposed to more health risks and experience fewer health protections than their more affluent peers. The environments in which children grow up—including within their family contexts, neighborhoods, and schools—impact children’s health in a variety of ways. For example, families with more income and resources are better able to afford their children’s health care, ensure their children eat healthy foods and are more likely to reside in communities where their children can play outside safely. Families with less money and resources, on the other hand, may struggle to afford needed health care for their children, may be more likely to experience food insecurity, and may lack safe and healthy places for their children to play. At the population level, these social inequities during childhood result in long-term health disparities well into adulthood<sup>23</sup>.

Latino children in Colorado come from a variety of social and economic backgrounds, but on average, are more likely to experience economic hardship than white children in the state<sup>24</sup>. Recent estimates suggest that nearly one in five Latino children in Colorado (18%) live in families with incomes below the federal poverty level, which is more than double the estimate for white children (7%)<sup>1</sup>. It is worth noting that these figures likely underestimate the number of children in Colorado who are experiencing economic hardship. According to the Colorado Self-Sufficiency Standard, for example, the minimum income families in Colorado need to meet their basic needs is far more than the official federal poverty threshold<sup>25</sup>. In other words, many families in Colorado who cannot afford basic living expenses, such as food, housing, and transportation, are not technically “poor” according to the federal government. Given that, the number of Latino and white children who experience considerable economic hardship in Colorado is likely greater than the estimated 18% and 7%, respectively, who were considered “poor” from 2017-2021<sup>26</sup>.

The NSCH asks families to report on several economic factors. Parents and guardians are asked specifically, “Since this child was born, how often has it been difficult to cover basic expenses like food and housing?” Latino children’s families were more than twice as likely to report experiencing *frequent* difficulty covering these basic expenses (23%) compared to white children’s families (10%). On the other hand, the majority of white children’s families (64%) reported *never* having any difficulty meeting their basic needs, whereas fewer than half of Latino children’s families (43%) reported *never* having difficulty.

**Latino children’s families were more likely to experience frequent difficulty covering basic expenses like food and housing compared to white children’s families.**

**FIGURE 9. Since this child was born, how often has it been difficult to cover basic expenses like food and housing? Colorado Children Ages 0 to 8.**

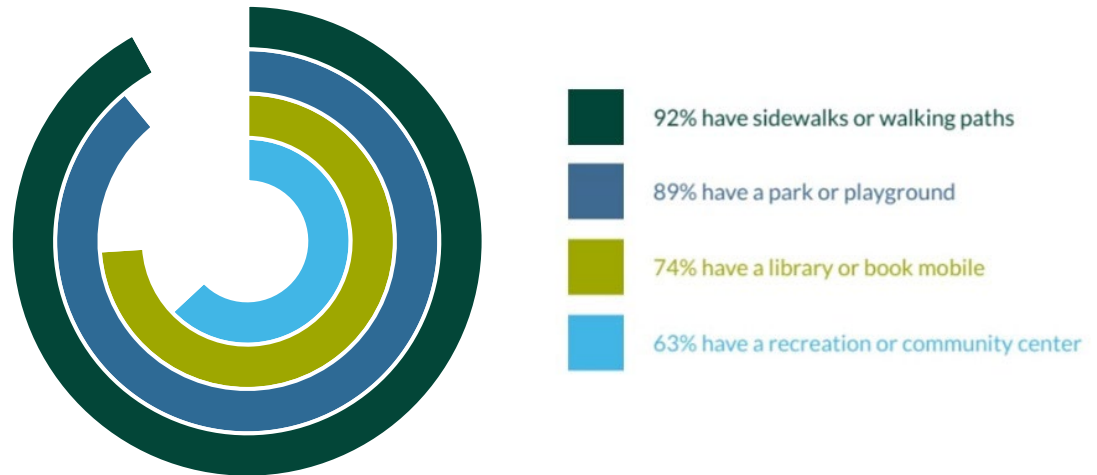


Neighborhoods are another important context for children’s health. Neighborhoods can influence children’s health in a multitude of ways that can foster or hinder their growth and development. Neighborhood amenities, such as sidewalks, parks, and playgrounds, make it possible for children to walk, bike, and play outside. These neighborhood features help increase children’s physical activity<sup>27</sup> and lower their risk of childhood obesity<sup>28</sup>. Throughout the U.S., neighborhood amenities are often markedly different for children depending on their racial and ethnic background<sup>29</sup>. These differences are, in part, because many children in the U.S. live in racially segregated communities<sup>30</sup> with different histories and resource investments<sup>31</sup>.

The NSCH asks parents and guardians whether several health-promoting amenities are present within their children’s neighborhoods, including sidewalks or walking paths, parks or playgrounds, recreation or community centers, and libraries or bookmobiles. Across children’s neighborhoods in Colorado overall, the level of these neighborhood amenities is generally high; among them, 92% have sidewalks or walking paths, 89% have a park or playground, 63% have a recreation or community center, and 74% have a library or bookmobile. There were no significant differences in the level of these neighborhood amenities present for young white and Latino children in Colorado. Nor were there differences in the average number of neighborhood amenities present. On average, young children in Colorado overall have roughly 3 of these 4 health-promoting amenities present within their neighborhoods.

**White and Latino children benefit from similarly high levels of neighborhood amenities.**

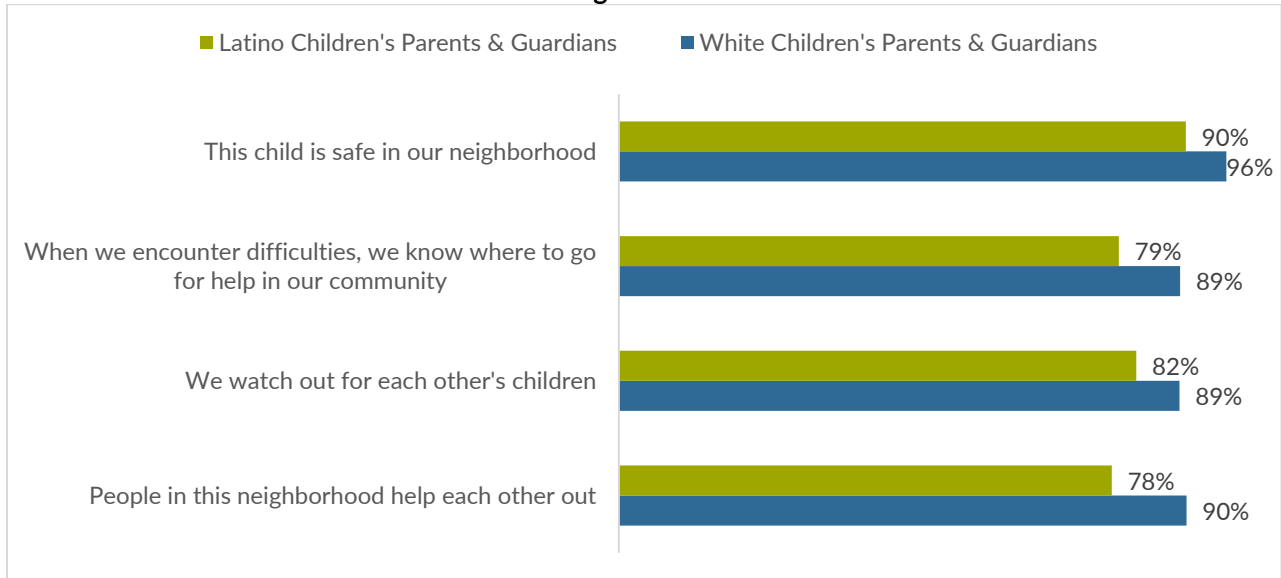
**FIGURE 10. Neighborhood Amenities Present Among Colorado Children Ages 0 to 8**



In addition to amenities, the social context within neighborhoods is also important for children’s health. If parents and guardians feel their neighborhoods are unsafe or unsupportive, for example, they may not allow their children to play outside. The NSCH asks parents and guardians a series of four questions about the level of social support they feel within their communities, and whether they perceive their neighborhoods as safe for their children. Overall, parents and guardians reported fairly high levels of social support and safety within their neighborhoods. Parents and guardians of Latino children, however, were slightly less likely to report that their neighborhood was safe for their child or that they felt supported by their community. One in 10 parents and guardians of Latino children felt their neighborhood was not safe for their child. In terms of social support, roughly 1 in 5 parents and guardians of Latino children did not feel that 1) people in their neighborhood helped each other out, 2) they watched out for each other’s children, or 3) they knew where to go for help within their communities.

**Latino children’s parents and guardians were more likely than white children’s to express concerns about the safety of their neighborhoods.**

**FIGURE 11. Perceived Neighborhood Support Among Parents and Guardians of Colorado Children Ages 0 to 8**



## Conclusion

All children in Colorado deserve equal access to the resources that promote and protect their health as they grow and develop. The health and health care differences uncovered in this report suggest that young white and Latino children in Colorado do not have equal access to all those resources.

Compared to white children in the state, Latino children were less likely to visit a doctor, and less likely to even have a place to go for health care when they needed it. Among the children who did see a health professional within the last year, Latino children were significantly more likely than white children to visit a hospital emergency room. In addition, when Latino children were taken to the doctor for a check-up, doctors were less likely to ask their parents and guardians about their concerns regarding their children’s health and development. These differences have the potential to bear out in terms of later health disparities, as more Latino children could miss important preventative health care measures (such as immunizations and developmental screenings).

The economic reality is different for the families of many white and Latino children in Colorado. Latino children’s families were more likely to struggle economically – in terms of covering their children’s health care costs, as well as affording their families’ most basic needs. Although Latino and white children had similar levels of health-promoting amenities in their neighborhoods, Latino children may be less able to take advantage of them. Parents and guardians of Latino children were more likely to express concerns about the safety of their neighborhoods for their children – a fact that may prevent them from going outside to play, exercise, or gather with others in the community.



Even so, there was little evidence that Latino children's health outcomes were adversely impacted by these inequities. Overall health ratings for white and Latino children were quite similar. According to their parents and guardians, most children within each group were in "excellent" or "very good" health. Latino children were only marginally less likely to receive lower health ratings compared to their peers.

## Appendix

### Data

Data for this analysis comes from the National Survey of Children's Health (NSCH). The NSCH is a household-level survey that provides national and state-level information on the health and well-being of children ages 0-17 in the U.S. The survey is funded and directed by the Health Resources and Services Administration Maternal and Child Health Bureau within the U.S. Department of Health and Human Services. The U.S. Census Bureau has fielded the survey, in its current version, from 2016 to 2021.

The survey provides yearly estimates on a rich set of indicators of children's physical health, health care, and health risk and protective factors. These estimates are considered representative of the non-institutionalized child population (ages 0 to 17) at the national and state level. To study smaller populations within states, each state may elect to sponsor an oversample. Targeted oversampling increases the number of households interviewed among particular subgroups or geographic areas, for example. Increasing the number of interviews among populations of special interest allows states to generate better estimates for children within those groups. Since 2020, 9 states have sponsored oversamples to improve estimates for specific racial and ethnic groups. In 2020, Colorado began sponsoring an oversample of local areas to enable regional estimates but does not currently do so for any racial or ethnic groups.

This analysis uses all available NSCH data pooled across the 6 years from 2016 to 2021. This aggregates enough sample children to generate estimates for the two most populous racial and ethnic subgroups ages 0 to 8 within Colorado: white and Latino children. Unfortunately, there were not sufficient numbers of children, even within the pooled data, to generate estimates for any other racial and ethnic groups. Following NSCH guidance, estimates for measures with cell sizes less than 30 are not reported.

### Method

Public-use NSCH data from 2016 to 2021 were downloaded from the Child & Adolescent Health Measurement Initiative (CAHMI) website<sup>32</sup>, combined, and analyzed using Stata 15 software. The sample was limited to Colorado children ages 0 to 8 at the time their household was surveyed, and whose parents or guardians reported their race and ethnicity as either 1) white (not Hispanic/Latino), or 2) Hispanic/Latino (all races).

All reported results are weighted and adjusted for complex survey design specifications. Descriptive analyses were first run without survey weights to check for small cell sizes. Any measures containing cells less than 30 children were flagged and those results were not reported. Survey weights were modified to adjust for the pooled multi-year sample according to NSCH guidance<sup>33</sup>. Estimates should be interpreted as the yearly average across the 6 years from 2016 to 2021 for the non-institutionalized child population ages 0 to 8 in Colorado.

T-tests for significant differences between outcomes for white and Latino children were run with survey weights applied using Stata's "svy" and "mlogit" commands. Results of t-tests for significant differences are denoted at the following levels: \*\*\*p<.001, \*\*p<.01, \*p<.05, +p<.1.

**Appendix Table 1. Pooled Sample (2016-2021) Estimates from the National Survey of Children's Health, Colorado Children Ages 0 to 8 (N=2,666)**

	Colorado Children Ages 0 to 8 Years					
	All Race/Ethnicities (N=2,666)		White (N=1,835)		Latino (N=507)	
	Mean/Proportion	SE	Mean/Proportion	SE	Mean/Proportion	SE
Sample Child's Age in Years	3.98	0.08	3.97	0.09	4.04	0.19
Number of Children in the Household	2.22	0.03	2.20	0.03	2.36 *	0.07
<b>Child's Health Care Use Last 12 Months</b>						
Seen a Doctor, Nurse, or Health Professional for Any Reason	0.90	0.01	0.93	0.01	0.86 **	0.03
How Many Hospital ER Visits						
No Visits	0.78	0.01	0.83	0.01	0.72 ***	0.03
1 or More Visits	0.22	0.01	0.17	0.01	0.28 ***	0.03
<b>Child's Health Care Providers</b>						
Child Has a Usual Place for Health Care When Sick	0.86	0.01	0.91	0.01	0.79 ***	0.03
Child Has a Usual Place for Preventative Health Care	0.95	0.01	0.98	0.01	0.91 ***	0.02
Child Has a Personal Doctor or Nurse	0.75	0.01	0.77	0.01	0.71 **	0.03
<b>Health Care Screening</b>						
Doctor Asked About Concerns About Child's Learning, Development, or Behavior	0.35	0.02	0.38	0.02	0.28 *	0.03
Given Questionnaire About Specific Concerns About Child's Development, Communication, or Social Behavior	0.50	0.02	0.54	0.02	0.46	0.04
Ever Had Vision Tested	0.55	0.02	0.56	0.02	0.53	0.04
<b>Health Care Costs</b>						
Child's Health Care Costs, Last 12 Months						
\$0	0.26	0.01	0.16	0.01	0.42 ***	0.03
\$1-\$249	0.32	0.01	0.34	0.02	0.28 ***	0.03
\$250-\$499	0.15	0.01	0.17	0.01	0.11 ***	0.02
\$500-\$1000	0.10	0.01	0.12	0.01	0.06 ***	0.01
More than \$1000	0.17	0.01	0.21	0.01	0.12 ***	0.02
Had Difficulty Paying Medical Bills, Last 12 Months	0.14	0.01	0.12	0.01	0.19 *	0.04
<b>Health Insurance Coverage</b>						
Employer Based Coverage	0.64	0.02	0.77	0.01	0.43 ***	0.03
Medicaid or CHP+ Coverage	0.33	0.02	0.19	0.01	0.57 ***	0.03
Coverage Meets This Child's Needs						
Always/Usually	0.93	0.01	0.93	0.01	0.93	0.02
Sometimes/Never	0.07	0.01	0.07	0.01	0.07	0.02
<b>Health Status</b>						
Poorer Overall Health	0.06	0.01	0.05	0.01	0.07 +	0.02
Poorer Oral Health	0.14	0.01	0.12	0.01	0.18 *	0.02
Decayed Teeth or Cavities	0.08	0.01	0.07	0.01	0.11 *	0.02
<b>Family Economic Hardship</b>						
Since this child was born, how often has it been difficult to cover basic expenses like food and housing?						
Never	0.57	0.02	0.64	0.02	0.43 ***	0.03
Rarely	0.28	0.01	0.26	0.02	0.33 ***	0.03
Often	0.15	0.01	0.10	0.01	0.23 ***	0.03
<b>Child's Neighborhood Characteristics</b>						
Sidewalks or Walking Paths Present	0.92	0.01	0.92	0.01	0.89	0.02
A Park or Playground	0.89	0.01	0.90	0.01	0.87	0.02
Recreation or Community Center	0.63	0.01	0.63	0.02	0.64	0.03
Library or Book Mobile	0.74	0.01	0.75	0.02	0.74	0.03
Number of Neighborhood Amenities	3.11	0.04	3.16	0.04	3.05	0.08
<b>Neighborhood Support</b>						
People in this neighborhood help each other out	0.85	0.01	0.90	0.01	0.78 ***	0.03
We watch out for each other's children	0.85	0.01	0.89	0.01	0.82 **	0.02
When we encounter difficulties, we know where to go for help in our community	0.85	0.01	0.89	0.01	0.79 ***	0.03
This child is safe in our neighborhood	0.94	0.01	0.96	0.01	0.90 **	0.02

Note: Results from tests for statistically significant differences between White and Latino children denoted +p<.1, \*p<.05, \*\*p<.01, \*\*\* p<.001.

---

<sup>1</sup> Colorado Children's Campaign. 2023. *Kids Count in Colorado! Building Understanding: Youth Mental Health and Well-Being in Colorado*.

<sup>2</sup> Child and Adolescent Health Measurement Initiative (CAHMI) (2022). 2016, 2017, 2018, 2019, 2020, 2021 National Survey of Children's Health (NSCH), Stata Indicator Data Sets. Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), and the Maternal and Child Health Bureau (MCHB). Retrieved 12/05/22 from [www.childhealthdata.org](http://www.childhealthdata.org).

<sup>3</sup> Omi, Michael and Howard Winant. 2015. *Racial Formation in the United States*. 3<sup>rd</sup> ed. New York, NY: Routledge.

<sup>4</sup> Noe-Bustamante, Luis, Lauren Mora, and Mark Hugo Lopez. 2020. *About One-in-Four U.S. Hispanics Have Heard of Latinx, but Just 3% Use It*. Pew Research Center. Retrieved Nov. 7, 2023. <https://www.pewresearch.org/hispanic/2020/08/11/about-one-in-four-u-s-hispanics-have-heard-of-latinx-but-just-3-use-it/>

<sup>5</sup> Colorado Children's Campaign. 2023. *Kids Count in Colorado! Building Understanding: Youth Mental Health and Well-Being in Colorado*.

<sup>6</sup> Bright Futures/American Academy of Pediatrics. 2023. "Recommendations for Preventative Pediatric Health Care." Retrieved Nov. 7, 2023. <https://www.healthychildren.org/English/family-life/health-management/Pages/Well-Child-Care-A-Check-Up-for-Success.aspx>

<sup>7</sup> Cairns, Christopher, Jill J. Ashman, and Zachary J. Peters. 2023. *Emergency Department Visits Among Children Aged 0–17 by Selected Characteristics: United States, 2019–2020*. Data Brief No. 469. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

<sup>8</sup> Parast Layla, Megan Mathews, Steven Martino, William G. Lehrman, Debra Stark, and Mark N. Elliott. 2022. "Racial/Ethnic Differences in Emergency Department Utilization and Experience." *Journal of General Internal Medicine* 37(1):49-56. doi: 10.1007/s11606-021-06738-0.

<sup>9</sup> Escobedo, Luis E., Lilia Cervantes, and Edward Havranek. 2023. "Barriers in Healthcare for Latinx Patients with Limited English Proficiency-a Narrative Review." *Journal of General Internal Medicine* 38(5):1264–1271. <https://doi.org/10.1007/s11606-022-07995-3>

<sup>10</sup> Grant, Roy and Danielle Greene. 2021. "The Health Care Home Model: Primary Health Care Meeting Public Health Goals." *American Journal of Public Health* 102(6):1096-1103.

<sup>11</sup> American Academy of Pediatrics. 2022. "Why is Medical Home Important." Retrieved Nov. 7, 2023. <https://www.aap.org/en/practice-management/medical-home/medical-home-overview/why-is-medical-home-important/>

<sup>12</sup> Chung, Paul J. Tim C. Lee, Janina L. Morrison, and Mark A. Schuster. 2006. "Preventative Care for Children in the United States: Quality and Barriers." *Annual Review of Public Health* 27:491-515. <https://doi.org/10.1146/annurev.publhealth.27.021405.102155>

- 
- <sup>13</sup> American Academy of Pediatrics. 2023. "Immunizations." Retrieved Nov. 7, 2023. <https://www.aap.org/en/patient-care/immunizations/>
- <sup>14</sup> Ingold, John. 2019. "11 charts that help explain health care costs in Colorado," *The Colorado Sun*, Jan. 3.
- <sup>15</sup> Colorado Health Institute. 2018. *Affordability in Colorado: Answers About Health Care Costs*. Retrieved Nov. 7, 2023. [https://www.coloradohealthinstitute.org/sites/default/files/file\\_attachments/CHA%20Q%26A%20no%20crops.pdf](https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/CHA%20Q%26A%20no%20crops.pdf)
- <sup>16</sup> Kaiser Family Foundation. 2021. "Health Insurance Coverage of Children 0-18." Retrieved Nov. 7, 2023. <https://www.kff.org/other/state-indicator/children-0-18/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
- <sup>17</sup> Kaiser Family Foundation. 2021. "Health Insurance Coverage of Children 0-18." Retrieved Nov. 7, 2023. <https://www.kff.org/other/state-indicator/children-0-18/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
- <sup>18</sup> Yu, Justin, James M. Perrin, Thomas Hagerman, & Amy J. Houtrow. 2021. "Underinsurance among children in the United States." *Pediatrics*. 149(1). <https://doi.org/10.1542/peds.2021-050353>
- <sup>19</sup> Nelson, Hunter. 2023. "Tens of thousands of Coloradans have already lost Medicaid coverage as continuous eligibility unwinds." *Colorado Children's Campaign*. Retrieved Nov. 7, 2023. <https://www.coloradokids.org/tens-of-thousands-of-coloradans-have-already-lost-medicaid-coverage-as-continuous-eligibility-unwinds/>
- <sup>20</sup> Collins, Sara R., David C. Radley, and Jesse C. Baumgartner. 2022. *State Trends in Employer Premiums and Deductibles, 2010–2020*. The Commonwealth Fund. <https://doi.org/10.26099/m5dt-5f70>
- <sup>21</sup> Freeman Cenegy, Laura, Justin T. Denney, and Rachel Tolbert Kimbro. 2018. "Family Diversity and Child Health: Where do Same-Sex Families Fit?" *Journal of Marriage and Family* 80:198-218.
- <sup>22</sup> Oberg, Charles, Sonja Colianni, and Leslie King-Schultz. 2016. "Child Health Disparities in the 21<sup>st</sup> Century." *Current Problems in Pediatric and Adolescent Health Care* 46(9):291-312.
- <sup>23</sup> Haas, Steven. 2008. "Trajectories of functional health: The 'long arm' of childhood health and socioeconomic factors." *Social Science & Medicine* 66(4):849-861. <https://doi.org/10.1016/j.socscimed.2007.11.004>
- <sup>24</sup> Colorado Children's Campaign. 2023. *Kids Count in Colorado! Building Understanding: Youth Mental Health and Well-Being in Colorado*.
- <sup>25</sup> Kucklick, Annie, Lisa Manzer, and Alyssa Mast. 2022. *The Self-Sufficiency Standard for Colorado 2022*. Colorado Center on Law and Policy. Retrieved Nov. 7, 2023. [https://selfsufficiencystandard.org/wp-content/uploads/2022/11/CO22\\_SSS.pdf](https://selfsufficiencystandard.org/wp-content/uploads/2022/11/CO22_SSS.pdf)
- <sup>26</sup> Colorado Children's Campaign. 2023. *Kids Count in Colorado! Building Understanding: Youth Mental Health and Well-Being in Colorado*.

- 
- <sup>27</sup> Christian, Hayley, Stephen R. Zubrick, Sarah Foster, Billie Giles-Corti, Fiona Bull, Lisa Wood, Matthew Knuiman, Sally Brinkman, Stephen Houghton, and Bryan Boruff. 2015. "The influence of the neighborhood physical environment on early child health and development: A review and call for research." *Health & Place* 33:25-36. <https://doi.org/10.1016/j.healthplace.2015.01.005>
- <sup>28</sup> Kranjac, Ashley, Catherine Boyd, Rachel Tolbert Kimbro, Brady Moffett, and Keila Lopez. 2021. "Neighborhoods Matter; But for Whom? Heterogeneity of Neighborhood Disadvantage on Child Obesity by Sex." *Health & Place*, 68: 102534. <https://doi.org/10.1016/j.healthplace.2021.102534>
- <sup>29</sup> Sanders, Mavis, Jennifer Winston, Shana E. Rochester. 2023. Most Black Children Live in Neighborhoods That Lack Amenities Associated with Child Well-being. *Child Trends*. Retrieved Nov. 7, 2023. <https://www.childtrends.org/blog/most-black-children-live-in-neighborhoods-that-lack-amenities-associated-with-child-well-being>
- <sup>30</sup> Elbers, Benjamin. 2021. "Trends in U.S. Residential Racial Segregation, 1990 to 2020." *Socius* 7. <https://doi.org/10.1177/23780231211053982>
- <sup>31</sup> Rothstein, Richard. 2018. *The Color of Law: A Forgotten History of How Our Government Segregated America*. 1<sup>st</sup> ed. New York, NY: Liveright Publishing Corporation.
- <sup>32</sup> Child and Adolescent Health Measurement Initiative (CAHMI) (2022). 2016, 2017, 2018, 2019, 2020, 2021 National Survey of Children's Health (NSCH), Stata Indicator Data Sets. Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), and the Maternal and Child Health Bureau (MCHB). Retrieved 12/05/22 from [www.childhealthdata.org](http://www.childhealthdata.org).
- <sup>33</sup> <https://www2.census.gov/programs-surveys/nsch/technical-documentation/methodology/NSCH-Guide-to-Multi-Year-Estimates.pdf>