Health Status of Children Entering Kindergarten in Nevada



Results of the 2022-2023
(Year 15)
Nevada Kindergarten Health Survey

This project was completed in collaboration with the following:

All Nevada County School Districts
Nevada School District Superintendents
Nevada Division of Public and Behavioral Health

This publication was supported by the Nevada State Department of Health and Human Services through Grant Number B04MC45229 from the Health Resources and Services Administration (HRSA) and the State of Nevada General Fund. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Department nor HRSA.

Nevada Institute For Children's Research & Policy



University of Nevada, Las Vegas School of Public Health The Nevada Institute for Children's Research and Policy (NICRP) is a not-for-profit, non-partisan organization dedicated to advancing children's issues in Nevada.

As a research center within the UNLV School of Public Health, NICRP is dedicated to improving the lives of children through research, advocacy, and other specialized services.

NICRP's History: NICRP started in 1998 based on a vision of First Lady Sandy Miller. She wanted an organization that could bring credible research and rigorous policy analysis to problems that confront Nevada's children, but she did not want to stop there; Miller wanted to transform our research into meaningful legislation that would make a real difference in the lives of Nevada children.

NICRP's Mission: Our mission is to conduct community-based research that will guide the development of programs and services for Nevada's children. For more information regarding NICRP research and services, please visit our website at https://nic.unlv.edu

NICRP Staff Contributors:

Amanda Haboush-Deloye, PhD Executive Director

Dawn Davidson, PhD Associate Director

Kayla Millette, BA Research Assistant II

Nevada Institute for Children's Research and Policy School of Public Health, University of Nevada, Las Vegas 4700 S. Maryland Parkway, Suite 335 Las Vegas, NV 89119 (702) 895-1040 https://nic.unlv.edu

Ex	ecutive Summary
Int	roduction9
	Methodology
	Limitations to the Study
Su	rvey Results
1	Response Rates
2	Demographics
	Gender
	Family Demographics
	Annual Household Income and Housing Tenure
	Race/Ethnicity
	Family Environment
	Nutrition 19
	Household Smoking
	Preschool Setting
	Reading to Young Children
3	Insurance Status
	Health Insurance Status of Kindergarten Students
	Annual Household Income and Insurance Status
4	Access to Health Care
	Barriers to Accessing Health Care
	Knowledge Regarding Accessing Support Services
5	Routine Care 32
	Routine Care for Kindergarten Students 32
6	Medical Conditions
	Types of Medical Conditions
	Developmental Screening
7	Dental Care
	Dental Care of Children Entering Kindergarten
8	Mental Health

9	Weight and Healthy Behaviors	41
	Behaviors Related to Healthy Weight in Young Children	45
	Physical Activity	45
	Television Viewing and Use of Electronic Devices	46
	Soda Consumption: Non-Diet Soda	48
	Soda Consumption: Diet Soda	49
	Juice Consumption	50
	Infant Feeding Behaviors	52
Ap	ppendix A. Comparison of Survey Results	55
	Summary of 2022-2023 Weighted Survey Results by County	55
	Comparison of Survey Results by Year	62
Ap	ppendix B. Survey Instrument	70
Αŗ	ppendix C. References	72

	T	\boldsymbol{C}		D	Г	C
Г	L	G	U	$\mathbf{\Gamma}$	Ŀ	D

Figure 1.1 Survey Participation by School District, Unweighted	14
Figure 1.2 Survey Participation Among All Rural Counties, Unweighted	14
Figure 2.1 Survey Data by School District, Weighted	15
Figure 2.2 Annual Household Income by School Year	16
Figure 2.3 Child's Race/Ethnicity	18
Figure 2.4 Life Events	19
Figure 2.5 Food Didn't Last and Didn't Have Money for More	20
Figure 2.6 Child's Type of Preschool Setting During Last Twelve Months	22
Figure 2.7 Reasons Why a Child Did Not Attend Preschool	23
Figure 2.8 Reading Frequency by Child's Race/Ethnicity	25
Figure 2.9 Reading Frequency by Household Income	25
Figure 3.1 Child's Health Insurance Status by School Year	26
Figure 3.2 Child's Insurance Status by Annual Household Income	28
Figure 3.3 Child's Insurance Status by Child's Race/Ethnicity	29
Figure 4.1 Types of Barriers When Accessing Health Care for Child	30
Figure 4.2 Knowledge of Access to Support Services by Child's Race/Ethnicity	31
Figure 5.1 Child's Routine Check-Up and Presence of Primary Care Provider	33
Figure 5.2 Presence of Primary Care Provider by Child's Insurance Status	33
Figure 5.3 Child's Routine Check-Up by Presence of Primary Care Provider	34
Figure 6.1 Types of Medical Conditions in Children	36
Figure 6.2 Developmental Screening by Child's Race/Ethnicity	37
Figure 7.1 Child's Dental Visit	38
Figure 8.1 Trouble Obtaining Mental Health Services by County	40
Figure 9.1 Child's Weight Status Category	43
Figure 9.2 Race/Ethnicity of Participants with a Valid Body Mass Index	44
Figure 9.3 Child's Weight Status Category by Child's Race/Ethnicity	45
Figure 9.4 Child's Weight Status Category by Amount of Physical Activity per Week	46
Figure 9.5 Child's Weight Status Category by Hours Spent on Electronic Devices on an	
Average Weekday	47
Figure 9.6 Child's Weight Status Category by Hours Spent on Electronic Devices on an	
Average Weekend	48
Figure 9.7 Child's Weight Status Category by Number of Non-Diet Sodas Consumed	
in a Week	49
Figure 9.8 Child's Weight Status Category by Number of Diet Sodas Consumed in a	
Week	50
Figure 9.9 Child's Weight Status Category by Number of Juice Drinks Consumed in a	
Week	51
Figure 9.10 Infancy Feeding Habits	53
Figure 9.11 Child Weight Status Category by Infancy Feeding Habits	54

TABLES

Table 1.1 Survey Response Rate by School District	12
Table 1.2 Kindergarten Unaudited Enrollment and Response Rate by School District	13
Table 2.1 Percent of Children in Households that Smoke	21
Table 2.2 Average Preschool Hours of Attendance	22
Table 2.3 Comparison of Reading Frequency per Week	24
Table 9.1 Weight Status Categories by BMI Percentile Ranges	41
Table 9.2 Weight Status Category Calculations Based on BMI Values	42
Table 9.3 Number of Hours Spent on Electronic Devices	47
Table 10.1 Summary of 2022-2023 Weighted Survey Results by County	55
Table 10.2 Comparison of Survey Results by Year	62

EXECUTIVE SUMMARY

To gather data on the health status of children entering the school system and to better track student health status, the Nevada Institute for Children's Research and Policy (NICRP), in partnership with Nevada School Districts, and the Nevada Division of Public and Behavioral Health, conducted a health survey of children entering kindergarten in Nevada. The goals of this study were to:

- Longitudinally quantify the health status of children as they enter school,
- Identify specific areas for improvement to potentially increase academic success, and
- Provide local information to policymakers to guide decisions that affect children's health.

In the fall of 2022, NICRP distributed questionnaires to almost all public elementary schools in the state. The survey had an overall response rate of 21.3 percent, with a total of 5,805 surveys received from parents/guardians in 15 of the 17 school districts in Nevada. Two rural counties did not return any surveys. The data herein are weighted (n = 27,110) to derive comparisons on issues that represent the following regions of the state: Clark County, Washoe County, and Rural Counties combined. Comparisons to previous years are also included. The following tables contain some of the key findings of the survey. Arrows are included in the tables to indicate the direction of the percent change from previous years.

Health Status: Compared to last year, the percentage of kindergartners identified as being at a healthy weight and being overweight or obese increased while the percentage of kindergartners identified as being underweight decreased. The percentage of kindergartners that participated in 60 minutes of physical activity every day of the week decreased this year as compared to last year. The percentage of kindergartners that drank non-diet soda and diet soda once a day or more decreased. The percentage of kindergartners that were exclusively breastfed at one, three, six, and twelve months decreased.

	2021-2022	2022-2023	% Change	
Weight Status				
Underweight	16.2%	15.6%	-3.7%	
Healthy	50.7%	51.3%	+1.2%	
Overweight/Obese	33.1%	33.2%	+0.3%	
Physical Activity				_
7 days per week of 60-minutes of physical activity	37.7%	36.7%	-2.7%	
Consumption of Non-Diet Soda				
Never drink non-diet soda	69.6%	69.0%	-0.9%	
Drink non-diet soda once a day or more	7.3%	6.7%	-8.2%	
Consumption of Diet Soda				
Never drink diet soda	86.3%	87.1%	+0.9%	
Drink diet soda once a day or more	3.8%	2.9%	-23.7%	₹
Infant Feeding Behaviors				
Breastfed Only – One Month	52.2%	49.7%	-4.8%	
Breastfed Only – Three Months	41.4%	39.7%	-4.1%	
Breastfed Only – Six Months	27.6%	26.9%	-2.5%	
Breastfed Only – Twelve Months	19.1%	18.3%	-4.2%	

Household Income: Compared to last year, the percentage of households making less than \$55,000 per year decreased, while the percentage of households making \$55,000 or more per year increased.

	2021-2022	2022-2023	% Change	
Household Income				
Less than \$25,000 per year	16.9%	15.6%	-7.7%	
\$25,000 - \$54,999 per year	31.5%	30.3%	-3.8%	
\$55,000 or more per year	51.8%	54.2%	+4.6%	

Insurance Status: Compared to last year, the percentage of uninsured children, children covered by private insurance, and children covered by Nevada Check-Up decreased, while the percentage of children covered by Medicaid increased.

	2021-2022	2022-2023	% Change	
Insurance Status				
Uninsured	5.9%	5.3%	-10.2%	
Private Insurance	48.8%	47.5%	-2.7%	
Medicaid	32.3%	34.3%	+6.2%	•
Nevada Check-Up	5.2%	4.1%	-21.2%	₹

Routine Care: Compared to last year, the percentage of children receiving a routine medical check-up, having a primary care provider, and visiting the dentist increased.

	2021-2022	2022-2023	% Change	
Routine Care				
Had a routine medical check-up in last 12 months	88.4%	90.5%	+2.4%	
Have a primary care provider	90.6%	91.6%	+1.1%	
Have been to a dentist in past 12 months	78.0%	78.9%	+1.2%	

Access to Health Care: Compared to last year, the percentage of respondents reporting lack of transportation, insurance, quality medical providers, and money/financial resources as barriers to accessing health care increased. In addition, a larger percentage of respondents tried to access mental health services this year as compared to last year, and a larger percentage had trouble obtaining them.

	2021-2022	2022-2023	% Change	
Barriers to Accessing Health Care**				
None	82.7%	79.0%	-4.5%	_
Lack of Transportation	2.6%	3.5%	+34.6%	
Lack of Insurance	5.8%	5.9%	+1.7%	
Lack of Quality Medical Providers	6.1%	7.8%	+27.9%	
Lack of Money/Financial Resources	6.8%	8.6%	+26.5%	
Have tried to access mental health services	7.3%	9.0%	+23.3%	
Had trouble obtaining mental health services***	47.4%	51.3%	+8.2%	

^{**}Since respondents could select more than one barrier, totals may exceed 100%.

For more detailed information about our survey questions, please see Appendix B of the full report.

Data for specific counties and schools may also be available upon request.

Please contact NICRP at (702) 895-1040 for additional information.

^{***}Only refers to respondents who answered that they had tried to access mental health services.

INTRODUCTION

Health plays an important role in academic achievement and is pivotal in determining long-term educational outcomes (Shaw et al., 2015; Suhrcke & de Paz Nieves, 2011). However, the connection between education and health is not straightforward. The relationship is complicated due to a myriad of social issues that can impact both components and is related to disparities rooted in a child's earliest experiences. Determining factors may include one's housing and neighborhood features, as well as access to services, health status, and where one falls on the socio-economic ladder (Ellen & Glied, 2015; Suhrcke & de Paz Nieves, 2011). Studies have found that disadvantages in these determining factors account for inequities that persist through the lifecycle into adulthood (Suhrcke & de Paz Nieves, 2011).

Does poor health lead to poor educational attainment or is the converse true? The answer is complex as "poor health not only results from lower educational attainment, it can also cause educational setbacks and interfere with schooling" (Center on Society and Health, 2014, p. 6). How does this impact children? Chronic absenteeism can be caused by chronic illness and mental health conditions along with multiple other factors (Allen et al., 2018). Frequent school absenteeism can have negative effects on academic performance which include high school and college graduation rates (Allen et al., 2018). Chronic absenteeism can prevent children from reaching important learning milestones and has been correlated with lower graduation rates, which can lead to poor outcomes later in life (U.S. Department of Education, 2019). It is estimated that, nationally, more than 8 million students are chronically absent each year (Attendance Works, 2022). Studies examining rates of absenteeism have found rates to be highest among the economically disadvantaged and those living in high poverty areas (Balfanz & Byrnes, 2012; Jacob & Lovett, 2017). Children with health conditions living in low-income communities may have limited access to health care and may not always receive the medical care needed to attend school regularly (Balfanz & Byrnes, 2012). Implementation of the Affordable Care Act helped improve health insurance coverage through the Medicaid expansion. A study examining the impact of Medicaid on long-term educational attainment found that children who can access Medicaid while they are young have higher rates of academic success (Cohodes et al., 2014). The benefits of Medicaid on academic achievement are highest among those who complete high school, attend college, and/or obtain a 4-year degree (Cohodes et al., 2014).

The first years of life are predictive of future success. The Brookings Institute's Social Genome Model measures children's success in life across five stages: early childhood, middle childhood, adolescence, transition into young adulthood, and adulthood (Sawhill & Karpilow, 2015). Through their research, they found that success in each stage is highly dependent upon success during earlier stages (Sawhill & Karpilow, 2015). For instance, "a child who is ready for school at age five is nearly twice as likely as one who is not, to complete middle school with strong academic and social skills" (Sawhill & Karpilow, 2015, p. 3). The first 8 years of life are instrumental to a child's success (Centers for Disease Control & Prevention [CDC], 2022c). Brain development depends on a variety of factors including proper nutrition in pregnancy, exposure to toxins, and the child's experiences with people and the world (CDC, 2022c). Cognitive development is the process of learning to think and reason, which can begin as early as 0-1 years old and continue up to late adolescence (CDC, 2021; Cincinnati Children's, 2020).

INTRODUCTION

Children between the ages of 6-12 think in concrete ways which include combing, separating, ordering, and transforming objects and actions (Cincinnati Children's, 2020). Children need to be nurtured and supported during these formative years and protected from extreme stress to avoid long term consequences (CDC, 2022c). Early and ongoing assessment and intervention efforts are needed to continue to improve long-term outcomes for Nevada's children.

COVID-19 has had a profound impact on the world and our nation, causing stress and uncertainty, and affecting the lives of children and families. Due to the changes in their environment and the increased isolation, children were left with social, emotional, and developmental impacts, as families faced unemployment or working from home, loss of loved ones, health challenges and lack of access to services such as mental health treatment, food, housing, and childcare (Office of the Surgeon General [OSG], 2021; Rabinowicz et al., 2020). Many of America's children still face major challenges such as increased rates of distress, anxiety, depression, and trauma-related mental health diagnoses, as well as behavioral reactions including higher inattention-hyperactivity, irritability, sleep problems, and clinging (OSG, 2021; Meade, 2021). Children need the support of parents, caregivers, and teachers to provide them with safe and supportive environments to overcome these challenges.

The health status of our children is vital to the future success of Nevada. Thus, NICRP has partnered with the state's 17 school districts, the Nevada Division of Public and Behavioral Health (DPBH), and several other community partners since 2008 to conduct an annual health survey of Nevada's children as they enter kindergarten. The purpose of this survey is to longitudinally quantify the health status of children as they enter school, identify specific areas for improvement to potentially increase academic success, and provide local information to policymakers and community organizations to make informed programmatic, system-level, decisions.

METHODOLOGY

The Kindergarten Health Survey (KHS) used in this study was created in 2008 in partnership with the Clark County School District and the Southern Nevada Health District and has been administered on an annual basis. The survey was intended to provide a general understanding of the overall health status of children when they enter school. The original short questionnaire was developed in both English and Spanish and consisted of 22 questions. Small revisions to the survey have been considered each year and are based on feedback obtained from a variety of organizations and coalitions statewide. Due to changes in the survey, data for all items presented in this report may not be available for all previous years. The current version of the one-page survey consists of 37 questions (12 demographic questions and 25 questions related to health and early childhood environments) and continues to be printed double-sided to provide the survey in both English and Spanish.

At the beginning of Fall 2022, questionnaires were distributed to kindergarten teachers in almost all public elementary schools in the state. Schools were not sent surveys if they are online only as the survey is only available on paper and not online. In addition, there are some state charter schools that did not indicate the number of estimated youth that were enrolled in their program and thus surveys could not be distributed to their program. Parents/guardians that chose to

INTRODUCTION

participate either turned the survey into the school office, their child's teacher, or mailed it directly to NICRP.

NICRP staff followed-up with each school to ensure receipt of materials or to answer questions regarding the survey. Schools that indicated they did not receive the materials were asked if they still wanted to participate. If they indicated yes, the surveys were mailed or delivered again. Additionally, follow-up calls were made in November and January to schools that had not yet submitted surveys. During the follow-up calls, NICRP staff attempted to verify if the schools distributed the surveys to parents/guardians and if the schools had any questions or problems with the distribution and collection of the surveys. In some cases, these phone calls reminded the schools to distribute the surveys or submit completed surveys.

Once surveys were received by NICRP, each survey was assigned a unique identification number by NICRP staff to aid in the tracking of survey responses. All survey responses were analyzed using IBM SPSS Statistics for Windows, Version 28.0. County frequencies were weighted to adjust for student responses. The weights were scaled so that the weighted count of students reflects each county's officially reported unaudited enrollment of schools that were sent surveys for the year of this report (State of Nevada Department of Education [NDE], 2022). As mentioned above, the only schools not included were those schools that are only online and had no means to collect a paper survey or state charter schools that did not respond to the request for estimated enrollment and therefore were not sent surveys. Therefore, the surveys received from the 5,805 respondents represent all public kindergarten students in the state of Nevada. Weighted estimates are representative for all kindergarten students in the state of Nevada, as well as for Clark County, Washoe County, and Rural Counties combined. Data presented in this report does not always total 100 percent due to the procedures used to round the data.

LIMITATIONS TO THE STUDY

As in all research studies, there are limitations to the data collected. First, all information contained in this report was self-reported by each parent or guardian. The information provided relied on the memory and honesty of the survey respondents. Second, while all the surveys received were included in the analyses, it is important to note, when reading the percentages presented, not all respondents answered all questions. All percentages calculated for this report are based on the total weighted number of people answering the question, rather than the total number of people who completed the survey. Third, the KHS data include children who attend public kindergarten and some Nevada State Charter schools that agreed to participate. Therefore, it does not represent all children of kindergarten age statewide. However, based on the number of 5-year-olds who were projected to reside in the state of Nevada in 2022 (approximately 38,767 children) (Nevada State Demographer, 2023) and the number of children who were enrolled in public kindergarten (31,951) (State of Nevada Department of Education [NDE], 2022), it appears that only 8.2 percent of children may not attend public kindergarten.

SURVEY RESULTS

Presented in the figures below are the basic frequencies (counts and percentages) of responses for all questions included in the survey. Cross-tabulations were also calculated for selected variables to provide additional information on specific topics. In addition, the 2022-2023 data were compared across counties (Clark, Washoe, and Rural Counties combined) for the current data collection period (See Appendix A, Table 10.1) with data from the previous years (2 years in the text, and three years in Appendix A, Table 10.2). All data presented after the response rates are weighted data.

1 RESPONSE RATES

Each school district involved in the study provided NICRP with the estimated number of kindergarten students enrolled in their district for the 2022-2023 school year. Based on these estimates, 41,209 surveys were distributed to participating schools. At the end of the data collection period (April 2023), 5,808 surveys were returned to NICRP for a response rate of 14.1 percent. Response rates for each school district (Table 1.1) ranged from 0 percent in Eureka and Lander County to 45.8 percent in Storey County.

Table 1.1 Survey Response Rate by School District

School District	# Surveys Distributed	# Surveys Returned	Response Rate
Carson City	600	234	39.0%
Churchill County	254	73	28.7%
Clark County	34,016	3,054	9.0%
Douglas County	350	130	37.1%
Elko County	700	286	40.9%
Esmeralda County	20	2	10.0%
Eureka County	14	0	0.0%
Humboldt County	263	31	11.8%
Lander County	100	0	0.0%
Lincoln County	50	21	42.0%
Lyon County	800	214	26.8%
Mineral County	75	18	24.0%
Nye County	386	119	30.8%
Pershing County	50	13	26.0%
Storey County	30	17	56.7%
Washoe County	3,401	1,559	45.8%
White Pine County	100	34	34.0%
All Districts	41,209	5,805	14.1%

In addition, NICRP calculated a response rate based on the number of surveys returned and the number of kindergarteners enrolled within each school district, including the Nevada State Public Charter School Authority (SPCSA) schools that chose to participate, by obtaining the unaudited enrollment numbers for each school district from NDE (2022, Table 1.2). This information was used to calculate how much of the actual kindergarten sample was surveyed.

This NDE unaudited enrollment response rate was compared to the survey distribution response rate based on the number of surveys distributed by each school district.

For the school districts that returned surveys, the difference in the NDE unaudited enrollment response rate and the survey distribution response rate ranged from 1.3 percent (Nye County) to 18.57 percent (Esmerelda County). The overall response rate for the unaudited enrollment response rate and the survey distribution response rate varied by 7.26 percent where in the past it was closer to 4 percent. Further review indicates that the Clark County data are largely responsible for this increase. In the past few years, the difference between the requested surveys and unaudited enrollments in Clark County was approximately 4 percent; however, this year it was 6.5 percent. Given the size of the Clark County school district and the abnormally large increase in the number of surveys requested, this difference alone accounts for the discrepancy with the NDE Unaudited Enrollment Response Rate. Therefore, for this survey year, the NDE Unaudited Enrollment Response Rate of 21.3 percent is a better measure of the survey response rate.

Table 1.2 Kindergarten Unaudited Enrollment and Response Rate by School District

School District	NDE Unaudited Enrollment	# Surveys Distributed Requested	NDE Unaudited Enrollment Response Rate	Survey Distribution Response Rate
Carson City	476	600	49.2%	39.0%
Churchill County	228	254	32.0%	28.7%
Clark County	19,737	34,016	15.5%	9.0%
Douglas County	313	350	41.5%	37.1%
Elko County	739	700	38.7%	40.9%
Esmeralda County	7	20	28.6%	10.0%
Eureka County	11	14	0.0%	0.0%
Humboldt County	232	263	13.4%	11.8%
Lander County	70	100	0.0%	0.0%
Lincoln County	56	50	37.5%	42.0%
Lyon County	604	800	35.4%	26.8%
Mineral County	53	75	34.0%	24.0%
Nye County	403	386	29.5%	30.8%
Pershing County	42	50	31.0%	26.0%
Storey County	31	30	54.8%	56.7%
Washoe County	4,093	3,401	38.1%	45.8%
White Pine County	96	100	35.4%	34.0%
All Districts	27,191	41,209	21.3%	14.1%

SURVEY PARTICIPATION BY SCHOOL DISTRICT

Figure 1.1 illustrates the participation of Washoe, Clark, and all Rural Counties combined. A total of 5,805 surveys were utilized for analysis with parents/guardians completing 52.6 percent of those surveys in Clark County, 26.9 percent in Washoe County, and 20.5 percent in the Rural Counties. This year, Clark County contributed a smaller percentage of the surveys (52.6%) as compared to last year (59.6%) and both Washoe County and the Rural Counties contributed larger percentages (Washoe: 26.9% v 24.7%; Rural Counties: 20.5% v 15.7%).

Figure 1.1 Survey Participation by School District, Unweighted 2022-2023 n = 5,805

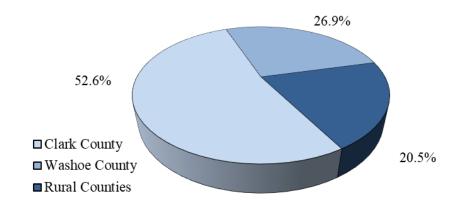
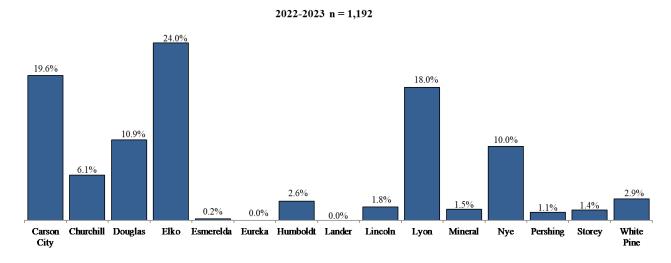


Figure 1.2 Illustrates county-specific participation for *only* Rural Counties, representing 20.5 percent of the total respondents.

Figure 1.2 Survey Participation Among All Rural Counties, Unweighted

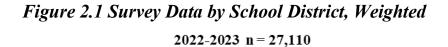


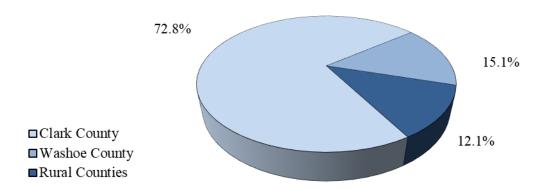
2 DEMOGRAPHICS

The survey was created to be one page in length, with one side printed in English and the reverse side printed in Spanish. Of the 5,805 respondents who returned surveys, 89.5 percent completed the English version and 10.5 percent completed the Spanish version.

WEIGHTED DATA

Please note that all data provided from this point on are weighted to be representative of the regions of the state and the state as a whole. Therefore, the responses received from the 5,805 respondents represent a total of 27,110 kindergarten students. Figure 2.1 below demonstrates that after weights are applied, the distribution of the data mirrors that of the actual distribution of kindergarten students by region and the state overall.





Parents/guardians were asked to respond to questions regarding their annual household income and their child's gender, race/ethnicity, and preschool setting before entering kindergarten. Data for each of these questions are presented in Figures 2.2 through 2.6 below, with all percentages calculated using the total number of completed responses rather than the total number of returned surveys.

GENDER

Among the kindergarten students for which gender was reported, the distribution included a larger percentage of females (50.8%) than males (49.2%).

FAMILY DEMOGRAPHICS

The average age of the child's mother was 34.38 (SD = 6.85), and the average age of the child's father was 36.74 (SD = 7.96). The average number of adults living in a household was 2.16 (SD = 0.99) and ranged from zero to ten adults. The number of children living in a household averaged 2.46 (SD = 1.15) and ranged from zero to 12 children. Of the parents/guardians that responded to the question, 28.2 percent indicated that they are a single parent or guardian.

ANNUAL HOUSEHOLD INCOME AND HOUSING TENURE

According to the U.S. Census Bureau (2021), the 2021 median household income in Nevada was \$65,686. This median income represents the middle value of a distribution and is the best measure of central tendency to reduce the impact of outliers (very high or very low incomes) in the distribution. In the current study, 53.6 percent of respondents reported an annual household income less than \$65,000 (See Figure 2.2).

Compared to previous survey years:

- The percentage of families with an annual household income between \$15,000 and \$64,999 decreased this year as compared to last year and the percentage of families with an annual household less than \$15,000 decreased slightly (See Appendix A, Table 10.2).
- The percentage of families with an annual household income of \$65,000 or more increased this year as compared to last year (See Appendix A, Table 10.2).

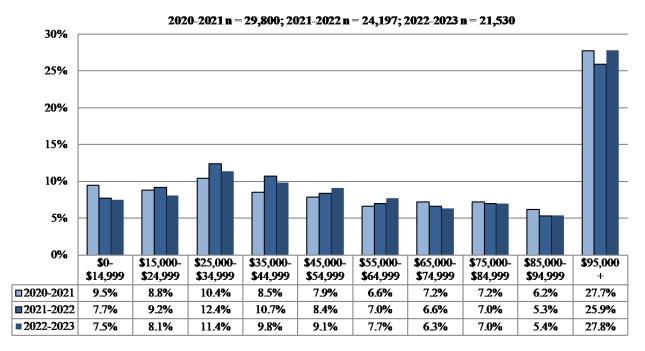


Figure 2.2 Annual Household Income by School Year

Housing and neighborhoods are key components to a child's growth and development. In the United States, the availability of rental housing has decreased, causing the rate of rental properties to increase. Lower income families and families with limited resources may face significant barriers to finding stable, healthy housing in such a competitive market. Housing instability is associated with a greater risk of fair or poor health of children and their caregivers and of maternal depressive symptoms (National Low-Income Housing Coalition, 2018). Housing can affect children's health outcomes in many ways. Poor housing is associated with higher risks of symptoms for depression, anxiety, and aggression from elementary school through young adulthood. Children in kindergarten living in poor quality homes are more likely to receive lower readiness scores compared to children who have stable housing (Gaitán, 2019). Households behind on rent had increased odds of fair and/or poor caregiver health, maternal depressive

DEMOGRAPHICS

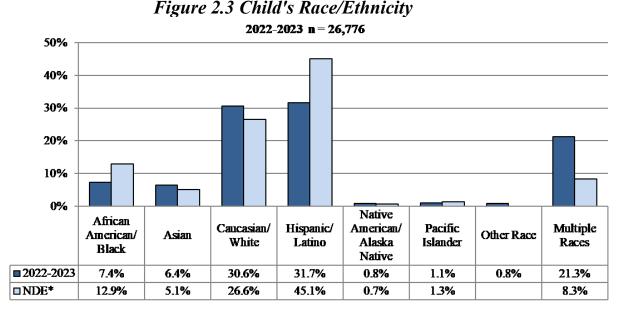
symptoms, child lifetime hospitalizations, fair and/or poor child health, and household material hardships. Families with multiple moves and a history of homelessness had similar adverse caregiver and child health and hardship outcomes (Sandel et al., 2018). Research on the impact of homeownership on child health and development outcomes has consistently demonstrated that children whose parents own the house they grow up in are more likely to finish high school (Coley et al., 2014; Yun, & Evangelou, 2017), have higher reading skills, have fewer emotional and behavioral problems (Coley et al., 2014), have higher earnings (Cooper & Luengo-Prado, 2014), and have a lower reliance on welfare as adults (Harkness & Newman, 2003). Therefore, a question was added to the survey to assess homeownership.

Responses to housing tenure indicate 51.4 percent of children live in rental housing and 48.6 percent live in owner-occupied housing. Upon further examination, income and racial disparities exist for housing tenure. With regards to income, 56.2 percent of the individuals who rent earn less than \$45,000 a year while only 16.3% of individuals who own earn less than \$45,000 a year. With regards to race, **78.6 percent of individuals who identified as African American/Black live in rental housing** compared to 32.3 percent of individuals who identified as Asian and 34.3 percent of those who identified as Caucasian. A large percentage of those who identified as Pacific Islander (70.9%), Native American/Alaskan Native (64.9%) also rent, followed by Hispanic/Latino (62.8%), Other (56.5%), and Mixed Race (53.8%).

COVID-19 had a large impact on housing, especially for those with low-incomes (Opportunity Finance Network [OFC], 2022). Many tenants are facing job loss and income loss that affect their ability to pay for rent, buy food, or access health care (OFC, 2022). Individuals in Low-Income Housing Tax Credit (LIHTC) financed affordable housing face immediate challenges, as they are forced to pay the full amount of rental payments, yet many of these properties will not be able to provide their usual services or pay for the increased cost of cleaning and sanitizing due to losses in revenue, which places these people at risk for losing their housing (OFC, 2022). One study found that eviction and foreclosure rates have doubled, with Black and Hispanic households having reported higher evictions and higher rates of rent/mortgage delinquency and delayed bill payments than White households (Chun & Grinstein-Weiss, 2020).

RACE/ETHNICITY

Race and ethnicity data were compared to the most recent data available from the NDE kindergarten student demographic profiles. Compared to the racial demographics of kindergarten students attending public schools in Nevada, KHS survey respondents included fewer Hispanic and African American/Black participants (13.4 and 5.5 percentage points respectively) and more multiple race and Caucasian participants (13.0 and 4.0 and percentage points respectively) (See Figure 2.3). It is important to note that NDE does not provide an option for "other," while the KHS does provide this as an option.



Source: State of Nevada Department of Education. (2022). 2022-2023 School Year Number of Students Receiving Educational Services as of 10/03/2022. [Excel] Retrieved from https://doe.nv.gov/DataCenter/Enrollment Data/

When comparing race/ethnicity across counties for the 2022-2023 school year (See Appendix A, Table 10.1), there are larger percentages of kindergarteners who are African American/Black, Asian, Hispanic, and Multiple Race in Clark County as compared to Washoe County and the Rural Counties. There are larger percentages of kindergarteners who are Native American/Alaskan Native in the Rural Counties and Washoe County than in Clark County. There are also larger percentages of kindergarteners who are Pacific Islander in Clark County and Washoe County than in the Rural Counties.

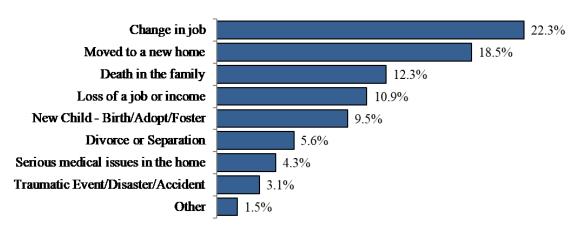
FAMILY ENVIRONMENT

Early childhood experiences shape a child's emotional and psychological health. Significant life events, even when positive, may still be stressful for a family. According to Harvard University's Center on the Developing Child, exposure to stressful events can be overcome if there are supportive relationships to help children cope (Center on the Developing Child, 2016; Cohen, 2017). Manageable stress alongside emotional support is referred to as positive stress, which can be beneficial to the development of coping skills (Center on the Developing Child, 2016). However, stress can develop into toxic stress for children facing prolonged or frequent adversity with a lack of supportive relationships to act as a buffer, leading to negative outcomes and a disruption in a child's physiological response (Center on the Developing Child, 2016). Children in adverse environments during their formative years may experience long-term consequences (Cohen, 2017; Masarik & Conger, 2017; Sciaraffa et al., 2018). Adults with more adverse experiences during their younger years have an increased risk for "heart disease, diabetes, substance abuse, and depression well into the adult years" (Center on the Developing Child, 2016, p. 12). Given the impact that significant life events can have on a child and their family, respondents were asked if they had any significant life experiences over the last year.

Almost two-thirds of the KHS respondents indicated they had experienced at least one significant life event (65.4%) in the past year. The most common life event was a change in job (22.3%), followed by a move to a new home (18.5%) (See Figure 2.4).

Figure 2.4 Life Events

2022-2023 n = 27,110



Note. Respondents were able to select multiple categories. Therefore, the total percent within each year might exceed 100.

Respondents were able to write in "other" life events they experienced. Common "other" life events included new family members joining their life, a parent not living at home (e.g., due to deployment or incarceration), pregnancy, and housing issues.

NUTRITION

Numerous families experience food insecurity, defined as an inability to consistently provide nutritious food in a socially acceptable way (Beckwith et al., 2020). In 2018, an estimated 128,160 children faced food insecurity in Nevada alone. Families that face food insecurity tend to make up for the lack of nutritious food through unhealthier, energy-dense foods (Lee et al., 2018). Research theorizes a lack of nutritional food may lead to the development of unhealthy lifestyles such as overeating. Furthermore, transitions into food insecurity are associated with anxiety and depressive symptoms and significantly worse health status outcomes compared to consistently food-secure children (Kimbro & Denney, 2015).

Due to potential health impacts of food insecurity on a child, starting in Year 14, respondents were asked if they had experienced food insecurity over the last year.

Within the past 12 months, **22.7 percent of respondents** indicated that it was often true (3.4%) or sometimes true (19.3%) that their food didn't last and they didn't have money to buy more.

When comparing data across counties:

• A larger percentage of respondents in Clark County indicated that it was sometimes or often true that they ran out of food and did not have money to buy more (25.0%) than in the Rural Counties (18.8%) and Washoe County (14.5%). (See Appendix A, Table 10.1.)

2022-2023 n = 26,444

3.4% Often true

19.3% Sometimes true

77.4% Never true

Figure 2.5 Food Didn't Last and Didn't Have Money for More

HOUSEHOLD SMOKING

In the U.S., more than 16 million people live with health conditions caused by smoking (CDC, 2018). Smoking can lead to chronic disability and contribute to diseases of the heart, cancers, strokes, and chronic lower respiratory diseases, all of which can cause preventable deaths (CDC, 2018). The impacts of smoking extend to those who are exposed to secondhand smoke. In the U.S., exposure to secondhand smoke accounts for 41,000 deaths among nonsmoking adults and 400 infant deaths annually (CDC, 2018).

In babies, secondhand smoke increases the likelihood of death due to Sudden Infant Death Syndrome (SIDS, CDC, 2022d). In young children, it increases the risk of lung problems, ear infections, and severe asthma (CDC, 2022d). The two most common places of secondhand smoke exposure for babies, children, and teens are their own home and family vehicle (CDC, 2022e). The combination of secondhand smoke and resulting health outcomes increases the risk of children missing school compared to those who remain unexposed. One study found that children with one or more adult smokers in the home had between 1.06 and 1.54 more days of missed school than children living with adults who do not smoke (Levy et al., 2011). Another study found that those who lived with a smoker were approximately 1.50 times more likely to report that they sometimes, often, or very often missed school due to illness (Merianos et al., 2018).

Due to the stay-at-home order issued during COVID-19, children were at an increased risk of being exposed to secondhand smoke, especially with higher rates of stress and anxiety leading to more tobacco consumption in the households (Okereke et al., 2021). Okereke and colleagues analyzed results from a 2020 online tobacco survey and found that the presence of children in the household did not deter people from smoking indoors; in fact, 63.5 percent of households in the U.S. with at least one daily smoker allowed smoking indoors during the stay-at-home orders, with 57.4 percent of households including children (Okereke et al., 2021).

The current survey assessed young children's exposure to secondhand smoke by asking if there were individuals in the home who smoked and if smoking was allowed in the home. As seen in Table 2.1, 12.8 percent of children live in a home with a household smoker, while almost two percent allow smoking in the home.

Table 2.1 Percent of Children in Households that Smoke

SMOKER IN HOUSEHOLD $n = 25,866$	SMOKING ALLOWED IN THE HOME $n = 25,270$
12.8%	1.9%

PRESCHOOL SETTING

Respondents were asked to indicate the type of preschool setting their kindergartener attended in the past twelve months, if any (See Figure 2.6).

Compared to previous years' data:

- The percentage of children who did not attend preschool decreased from 36.5 percent last year to 30.2 percent this year.
- Participation in school district preschool increased this year (32.4%) as compared to last year (23.1%) while participation in home-based preschool decreased (8.5% to 6.2%).

When comparing the 2022-2023 data across counties (See Appendix A, Table 10.1):

- A larger percentage of children attended school district preschool in Clark County (34.2%) as compared to the Rural Counties (29.5%) and Washoe County (26.3%).
- A larger percentage of children attended home-based preschool in the Rural Counties (7.8%) as compared to Clark County (6.1%) and Washoe County (5.1%).
- A larger percentage of children attended "other facility/center" in Washoe County (27.8%) as compared to the Rural Counties (17.8%) and Clark County (14.8%).

2020-2021 n = 29,800; 2021-2022 n = 29,487; 2022-2023 n = 26,567 50% 40% 30% 20% 10% 0% Friends/ University Other School None/ Home-Multiple Family/ **Head Start** Facility/ Campus District Stayed Neighbor **Based Care** Sites Care Preschool Preschool Home Care **2020-2021** 2.3% 28.7% 25.8% 5.1% 12.5% 5.8% 15.8% 4.0% **2021-2022** 5.0% 0.7% 4.3% 17.0% 8.5% 23.1% 36.5% 4.8% **2021-2023** 5.0% 17.1% 6.2% 0.7% 32.4% 30.2% 3.5% 4.8%

Figure 2.6 Child's Type of Preschool Setting During Last Twelve Months

Average Hours of Preschool Attendance

Data from 2019 indicates that of children five years of age and younger who were not enrolled in kindergarten, 59 percent were in at least one weekly nonparental care arrangement, 62 percent were attending daycare or pre-kindergarten, 38 percent were being taken care of by a relative, and 20 percent were cared for in a private home (National Center for Education Statistics, 2021). Thus, it is important to understand how preschool environments affect children's overall well-being. Some of these effects, positive or negative, might be correlated with the time spent in non-parental care. Therefore, in addition to the type of preschool setting, the survey assesses the amount of time children spend in the preschool setting.

Results shown in Table 2.2 indicate that 34.5 percent of parents/guardians have their child at home during the week, 37.3 percent have their child in someone else's care for 20 hours or fewer per week, 24.0 percent have their child in someone else's care 21-40 hours per week, and only 4.2 percent have them in someone else's care more than 40 hours a week.

When comparing the results across counties (See Appendix A, Table 10.1):

• A larger percentage of children were in care more than 20 hours a week in Washoe County (46.4%) as compared to the Rural Counties (27.0%) and Clark County (24.6%).

Table 2.2 Average Preschool Hours of Attendance

0 HRS	1-4 HRS	5-10 HRS	11-15 HRS	16-20 HRS	21-30 HRS	31-40 HRS	41+ HRS
34.5%	8.6%	12.9%	10.2%	5.6%	11.0%	13.0%	4.2%

Note. n = 26,072

Barriers to Preschool Attendance

The KHS captures information about barriers that prevent preschool enrollment in order to identify effective strategies to increase access for families who wish to enroll children in preschool. When asked to select reasons why their child did not attend preschool or attend the preschool of their choice, the most common reason was cost (See Figure 2.7). In addition to the response options provided, respondents were able to write in other reasons why their child did not attend preschool or go to their preferred preschool. Among those who wrote in an "other" barrier, the most common barriers included COVID-19, not meeting the income requirement, and not having preschool available/offered.

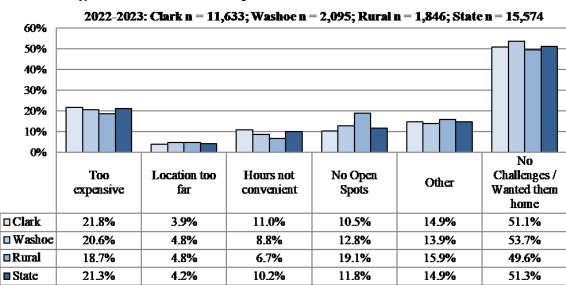


Figure 2.7 Reasons Why a Child Did Not Attend Preschool

Note. Respondents were able to select multiple categories

Parents/guardians were also asked whether they would place their child in full-time versus part-time preschool if given the option. More than half of parents/guardians (57.1%) indicated that they preferred full-time preschool and 51.9 percent indicated that they would prefer their child to attend preschool offered by the school district.

READING TO YOUNG CHILDREN

Reading to a child enhances cognitive development, language acquisition, and stimulates learning (Children's Bureau, 2017). Variations in socioeconomic status are correlated with differences in language outcomes (Fernald et al., 2013). Children's exposure to oral language is significantly lower in families with incomes below the federal poverty level (Fernald et al., 2013). This lack of exposure can result from multiple factors, including lack of books in schools and at home, poor motivation from parents to assist children in developing an interest in reading (Mohammed & Amponsah, 2018), parents using shorter sentences and fewer diverse words, and parents having lower reading comprehension (Neuman et al., 2018). Lack of exposure to oral language may result in delayed language and literacy development, and these delays are often notable once children enter kindergarten (Fernald et al., 2013). This disparity in early life puts a child behind just as they are starting school and is a predictor of later academic achievements and

DEMOGRAPHICS

failures (Fernald et al., 2013). As a result of these important findings, the KHS captures information about how often children were read to in the home.

In 2022-2023, 27.5 percent of children were read to every day in the past week and 3.2 percent of children were not read to at all in the past week. When comparing KHS survey data with national and statewide data on reading, a larger percentage of our sample was read to four to six days of the week than the national and state averages and smaller percentages of our sample were read to zero days, one to three days, and every day as compared to both the national and state samples (See Table 2.3).

Table 2.3 Comparison of Reading Frequency per Week

	0 Days	One to Three Days	Four to Six Days	Every Day
Nationwide	8.6%	36.3%	16.5%	38.6%
Nevada	8.1%	45.2%	14.0%	32.7%
KHS Data	3.2%	29.7	39.6%	27.5%

Source: Child and Adolescent Health Measurement Initiative. (2021). 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services. Health Resources and Services Administration (HRSA). Maternal and Child Health Bureau (MCHB). Retrieved 02/12/23 from [www.childhealthdata.org].

Figures 2.8 and 2.9 depict the frequency of reading by race/ethnicity and household income and illustrate the following:

- A larger percentage of Caucasian children were read to daily (40.8%) as compared to children of other races/ethnicities.
- Hispanic children trailed behind the most in terms of being read to daily.
- Among those with a household income of less than \$45,000, the percentage of children read to daily increased as household income increased. Among households with an income between \$65,000 and \$94,999, the percentage of children read to daily decreased as income increased.

When comparing results across counties (See Appendix A, Table 10.1):

- A smaller percentage of children were read to daily in the past week in the Rural Counties (25.0%) as compared to Washoe County (28.2%) and Clark County (27.8%).
- Larger percentages of children were not read to in the past week in Washoe County and the Rural Counties (both at 3.9%) as compared to Clark County (2.9%).

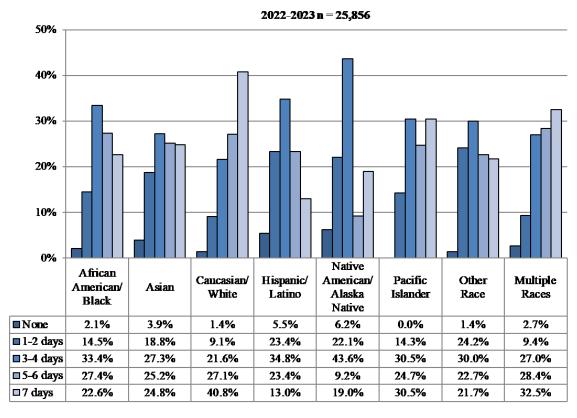
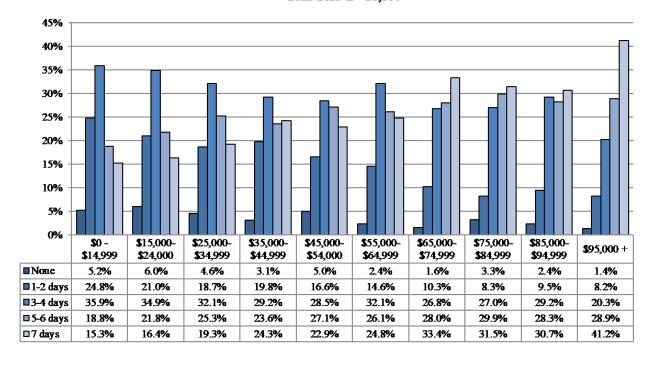


Figure 2.8 Reading Frequency by Child's Race/Ethnicity

Figure 2.9 Reading Frequency by Household Income 2022-2023 n = 20,864



3 INSURANCE STATUS

Nevada has consistently placed near the bottom of national rankings for the percent of children covered by health insurance. In the United States, 4.3 million children (5.6%) under the age of 19 are without health coverage (Bunch & Bandekar, 2021). Nevada was ranked 49th in the U.S. in 2021, with 8.6 percent of children reported as not having health insurance (Georgetown University Center for Children & Families [CCF]), 2022.

A correlation exists between children's health insurance status and access to health care services. Research shows that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes as compared to insured children. For example, parents of uninsured children are more likely to report that their child has an unmet health need (Flores et al., 2017; Alker & Pham, 2018). Nevada was ranked 48th when compared nationally across five dimensions of health: health care access and affordability, prevention and treatment, avoidable hospital use and cost, equity, and healthy lives (Radley et al., 2019). Changes in health insurance status could be affected by COVID-19, as more than seven million people lost their employer-sponsored health insurance due to individual layoffs and layoffs of their dependents (Fronstin & Woodbury, 2020).

HEALTH INSURANCE STATUS OF KINDERGARTEN STUDENTS

In the current study, respondents were asked to specify their child's current health insurance coverage (See Figure 3.1).

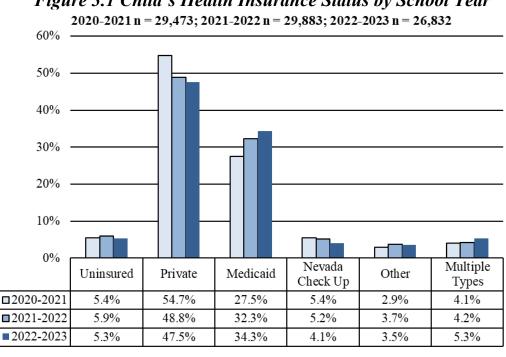


Figure 3.1 Child's Health Insurance Status by School Year

Overall, 94.7 percent of respondents reported that their child had some type of health insurance while 5.3 percent of respondents stated that their child had no coverage.

Of the health insurance options:

- Slightly less than half (47.5%) of the respondents indicated that their kindergartener had private health insurance.
- There were 38.4 percent of respondents that indicated that their kindergartener had public health insurance (either Medicaid or Nevada Check Up, the state's Children's Health Insurance Program (CHIP)).

A small percentage of individuals indicated that their child either had "other" insurance (3.5%) or multiple types of insurance (5.3%). When possible, "other" responses were re-coded into existing categories. For those that remained in the other category, some included medical sharing or discount plans and insurance providers listed as providing both private and public insurance, so it was not possible to determine their appropriate categorization.

CHIP enrollment increased 6.5 percent from November 2021 to October 2022 (Center for Medicaid & CHIP Services [CMCS], 2022b). Approximately 41.4 million children in the U.S. were enrolled in CHIP or Medicaid in October 2022, making up 46.5% of all Medicaid and CHIP enrollment (CMCS, 2022a). It is important to ensure the children covered by public insurance have equal access to quality care, as insurance coverage does not always result in equal access to care (Story et al., 2014). Large disparities in access to care remain based on the type of health insurance (Bisgaier & Rhodes, 2011; Cossman et al., 2014). Children with public insurance are more likely to have reduced access to care compared to children with private insurance (Alexander, & Currie, 2017).

Increasing Access to Insurance through Nevada Health Link (Silver State Health Insurance Exchange)

Due to regulations of the Affordable Care Act (ACA), in October of 2013, Nevada began its health exchange program, the Silver State Exchange, better known as Nevada Health Link. The KHS survey captured respondents' participation in that program for their children and found:

- The percent of respondents that reported they or someone else had applied for insurance through the exchange for their child this year (14.5%) was similar to what was reported last year (14.3%).
- Of the children for whom insurance was applied for through the exchange, 87.4 percent were approved (See Appendix A, Table 10.1).

ANNUAL HOUSEHOLD INCOME AND INSURANCE STATUS

The ACA drastically increased the number of insured children, however gains made under ACA have been declining in recent years (Alker & Roygardner, 2019). The effect is most pronounced in low to middle income families (See Figure 3.2).

- 26.7 percent of children who are uninsured reside in households with an annual income of less than \$25,000.
- 64.3 percent of children who are uninsured live in a household with an annual income of less than \$55,000.

2022-2023: Uninsured n = 1.054: Insured n = 20.308: Total n = 21.362 30% 25% 20% 15% 10% 5% 0% **\$**0 -**\$**15.000 -\$25,000 -\$35,000 - \$45,000 -\$55,000 -\$65,000 -\$75,000 -\$85,000 \$95,000+ Total \$14,999 \$24,999 \$34,999 \$44,999 \$54,999 \$64,999 \$74,999 \$84,999 \$94,999 □Uninsured 10.2% 9.0% 100% 15.4% 11.3% 18.1% 7.1% 12.4% 9.8% 4.9% 1.7% ■ Insured 6.9% 7.9% 11.0% 10.0% 8.9% 7.5% 6.1% 7.0% 5.6% 28.9% 100%

Figure 3.2 Child's Insurance Status by Annual Household Income

Race/Ethnicity and Insurance Status

Figure 3.3 illustrates the relationship between race/ethnicity and insurance status.

• The largest percentage of children without insurance were those identified as "Other Race" (13.1%), followed by children identified as Hispanic (9.4%).

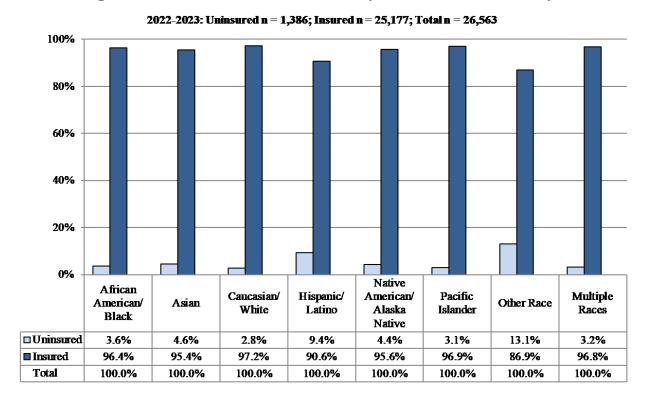


Figure 3.3 Child's Insurance Status by Child's Race/Ethnicity

Research suggests that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Kaiser Family Foundation, 2019). Approximately 18.3 percent of Hispanic individuals of all ages across the country are uninsured and 9.5 percent of Hispanic children are uninsured (Keisler-Starkey & Bunch, 2021). States with a high proportion of non-U.S. born Hispanic residents, such as Nevada, are expected to experience an increase in this rate. Although many of these children are eligible for public health insurance, enrollment is likely not growing due to fewer enrollment outreach efforts, elimination of the penalties for not having health coverage, language and literacy challenges, and persistent fears surrounding public charge policy (Artiga et al., 2020).

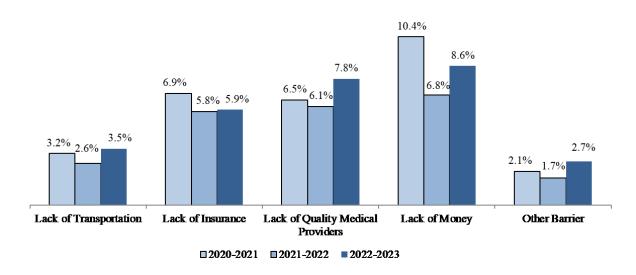
4 ACCESS TO HEALTH CARE

BARRIERS TO ACCESSING HEALTH CARE

When asked about accessing health care for their child, **21.0 percent of respondents reported experiencing at least one barrier**. Of the barriers presented to respondents (See Figure 4.1), the most commonly selected was "lack of money."

Figure 4.1 Types of Barriers When Accessing Health Care for Child





Note. Respondents were able to select multiple categories, therefore, the total percent within each year might exceed 100.

Of all respondents experiencing one or more barriers to accessing health care:

- 85.1 percent reported having health insurance (32.5% Private, 38.2% Medicaid, 3.9% Nevada Check-Up, and 10.5% Other/Multiple)
- 59.5 percent reported an annual household income of less than \$55,000.

The three most common "other" barriers provided by respondents, accounting for 74.0 percent of all of the "other" responses, included trouble getting an appointment, insurance specific barriers, and lack of providers.

KNOWLEDGE REGARDING ACCESSING SUPPORT SERVICES

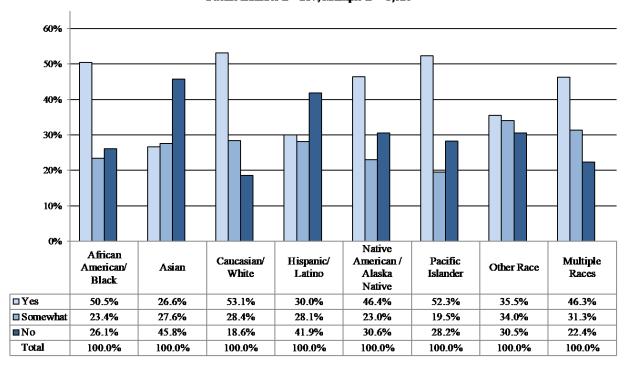
A question was added to the 2013-2014 survey to determine if parents/guardians know how to access support services and programs to meet their family's needs. This survey question included the examples of food/bills, parent classes, and support groups.

Overall, 29.4 percent of respondents reported that they did not know how to access support services and 28.4 percent were somewhat aware of how to access support services. Respondents in Clark County (38.7%) were less likely to know how to access services than those in the Rural Counties (51.8%) and Washoe County (51.0%). (See Appendix A, Table 10.1.)

When exploring knowledge regarding accessing support services and race/ethnicity, results indicate that parents/guardians of children identified as Asian or Hispanic have less knowledge about accessing support services than the other groups.

Figure 4.2 Knowledge of Access to Support Services by Child's Race/Ethnicity

2022-2023: African American/Black n = 1,939; Asian n = 1,689; Caucasian/White n = 8,089; Hispanic/Latino n = 8,347; Native American/Alaska Native n = 209; Other n = 197; Pacific Islander n = 287; Multiple n = 5,620



5 ROUTINE CARE

Access to routine medical care services is a major factor contributing to a child's health status. Routine care includes basic health care services such as immunizations, vision screenings, and well-child visits. Nevada ranked 49th in the U.S. in 2021 for the proportion of children without health insurance, with 8.6% of children lacking coverage (CCF, 2022). Children without health insurance are more likely to forego routine care than insured children. The 2020-2021 National Survey of Children's Health found that 86.3 percent of children that do not have a medical home are uninsured, compared to 58.1 percent that have private health insurance and 73.2 percent that have Medicaid. In addition, 66.9 percent of children that do not have someone the parent thinks of as their personal doctor or nurse were uninsured compared to 51.2 percent of those that were insured (Child and Adolescent Health Measurement Initiative, 2021).

Having access to regular primary care services or a medical home is a key indicator of children's overall health status. Studies have shown that having access to usual care has been associated with better health and reduced health disparities, and that children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Cecil et al., 2016; Huntley et al., 2014; Pourat et al., 2015; Witt et al., 2017). Primary care providers (e.g., physicians, physician's assistants, nurses) offer a medical home where children can receive basic care services including annual check-ups and immunizations. Children who see the same pediatrician regularly have better health status as compared to those who do not have access. Having a pediatrician increases successful screenings during check-ups and decreases emergency room visits (Snyder, 2020).

ROUTINE CARE FOR KINDERGARTEN STUDENTS

Current survey results show that 90.5 percent of kindergarteners had at least one routine medical check-up in the twelve months preceding the survey. Similarly, 91.6 percent of parents/guardians reported that their child had a primary care provider (See, Figure 5.1).

Compared to 2021-2022 data:

- A slightly larger percentage of children have a primary care provider this year (91.6%) as compared to last year (90.6%) (See Appendix A, Table 10.2).
- A slightly larger percentage of children had a routine check-up this year (90.5%) as compared to last year (88.4%) (See Appendix A, Table 10.2).

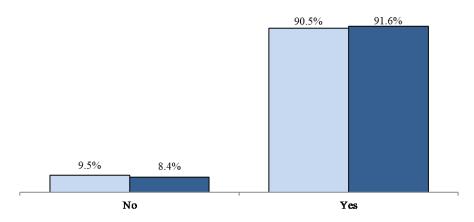
Health insurance can be a factor in accessing care. In the current sample, 93.9 percent of children with health insurance have a primary care provider while 49.5 percent of children without insurance have a primary care provider (See Figure 5.2).

Having a primary care provider is related to whether a child has had a routine check-up in the past twelve months (See Figure 5.3). In the current sample,

- Of the children that had a routine check-up, 4.5 percent did not have a primary care provider.
- Of the children that had not had a routine check-up in the last year, 42.7 percent did not have a primary care provider.

Figure 5.1 Child's Routine Check-Up and Presence of Primary Care Provider

2022-2023: Check-Up n = 26,322; Primary Care Provider n = 26,195

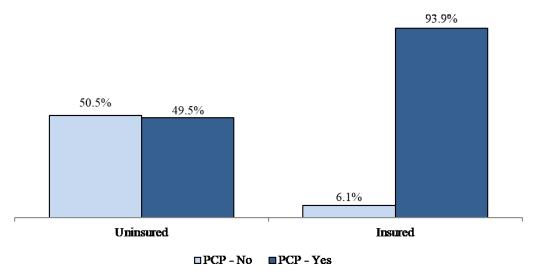


□ Has your child been seen by a medical provider for a routine check-up in the past twelve months?

■ Does your child have a primary care provider?

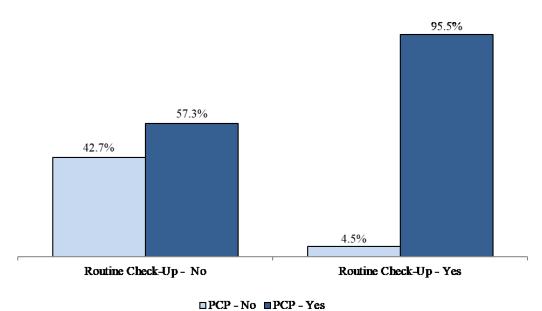
Figure 5.2 Presence of Primary Care Provider by Child's Insurance Status





Note. PCP – Primary Care Provider; Percentages are calculated out of the number within each PCP category.

Figure 5.3 Child's Routine Check-Up by Presence of Primary Care Provider 2022-2023: No PCP n=2,083; Has PCP n=23,670; Total n=25,753



Note. PCP – Primary Care Provider; Percentages are calculated out of the number within each PCP category.

6 MEDICAL CONDITIONS

Approximately 16% of Nevada's children have special health care needs (Child and Adolescent Health Measurement Initiative, (2021). Treatment for these children may be expensive and can require a team of medical care providers, led by a primary care physician, devoted to the treatment and maintenance of their conditions. Thus, quality health insurance coverage is vital for children with special health care needs, as it improves their chances of having ongoing care and treatment.

Types of Medical Conditions

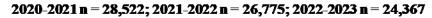
According to the 2020-2021 National Survey of Children's Health (2021) in Nevada, 15.7 percent of children aged zero to 17 have special health care needs and only 7.8 percent receive care in a well-functioning system. The criteria for children to be designated as having a special health care need includes both the child's experiences and consequences due to a medical, behavioral, or other health condition, and the fact that the condition has persisted for 12 months or longer. Unfortunately, only 58.4 percent of Nevada's children with special health care needs, aged zero to 17, had adequate and continuous insurance in the past year (Child and Adolescent Health Measurement Initiative, 2021).

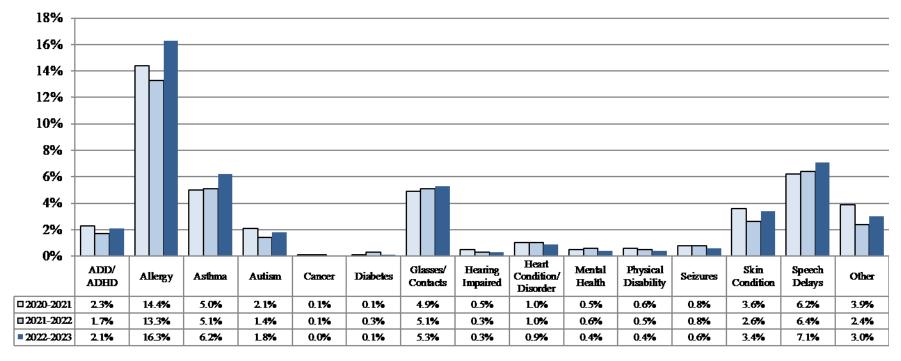
According to this year's survey results, **35.0 percent of respondents reported that their child had a medical condition** (See Figure 6.1).

• The most common medical condition reported was allergies (16.3%), followed by speech delays (7.1%), asthma (6.2%), and glasses/contacts (5.3%).

Of the respondents that reported their child had a medical condition, 3.0 percent indicated that their child had an "other" health condition not listed on the survey. The most common "other" conditions included genetic conditions, blood disorders, lung/breathing issues, kidney conditions, and bowel conditions.

Figure 6.1 Types of Medical Conditions in Children





Note. Respondents may select multiple categories; therefore, the total percent within each year may exceed 100%.

DEVELOPMENTAL SCREENING

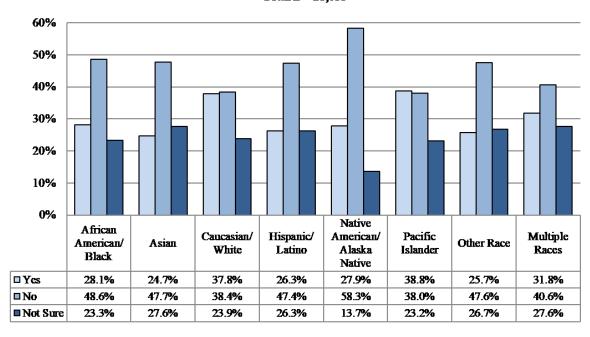
Developmental screening is a method used by childcare providers (e.g., mental health providers, pediatricians, and childcare professionals) to assess whether a young child has delayed mental or physical development. Early identification of developmental delay coupled with the initiation of intervention programs may contribute to greater academic and social success throughout a child's life (Sawhill & Karpilow, 2015; Vitrikas et al., 2017). Many children with developmental disabilities are not identified until they have entered kindergarten or later, causing the child to miss out on crucial years of intervention (CDC, 2020a). Therefore, a question on the current survey asked respondents whether or not their child had received a developmental screening in the twelve months prior to the survey.

Of all respondents who answered this question, 43.2 percent reported that their child did not have a developmental screening and 25.6 percent reported that they were unsure if their child had a screening. When exploring differences among counties, more respondents in the Rural Counties (37.3%) reported that their child had a developmental screening as compared to Washoe County (36.0%) and Clark County (29.1%) (See Appendix A, Table 10.1).

When exploring race/ethnicity differences in screening (See Figure 6.2), results indicate that the largest percentage of children that received a developmental screening were Pacific Islander and the smallest percentage of children that received a screening were Asian.

Figure 6.2 Developmental Screening by Child's Race/Ethnicity

2022-2023: African American/Black n = 1,897; Asian n = 1,673;
Caucasian/White n = 7,997; Hispanic n = 8,164; Native American/Alaska Native n = 204;
Pacific Islander n = 276; Other Race n = 206; ; Multiple Races n = 5,636;
Total n = 26,053



7 DENTAL CARE

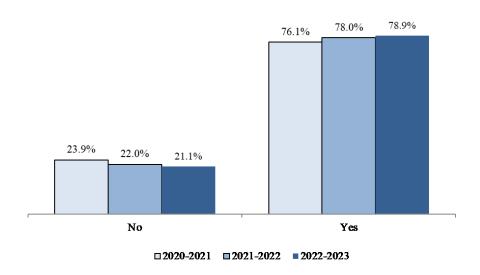
Routine dental care is also important to a child's health and daily functioning. Children without access to regular dental care are more likely to experience dental problems such as dental cavities and tooth abscesses. Poor oral health is consistently related to worse academic performance regardless of factors such as age, sex, household income, and type of health insurance (Guarnizo-Herreño et al., 2019; Ruff et al., 2018). Children with oral health problems are more likely to miss more than three or six school days compared to children without oral health problems (Guarnizo-Herreño et al., 2019).

Research indicates that uninsured children are much more likely to have unmet dental needs (e.g., teeth cleanings) and to have had fewer dental visits compared to children who are insured. Further, children who are privately insured have fewer unmet dental needs and more dental visits on average than children who are publicly insured (Zhou et al., 2017). Duffy and colleagues (2018) found that uninsured children were at an increased risk for untreated dental carries (22%) compared to children with private insurance (8.9%). Additionally, 39.9 percent of children that did not receive any type of dental care in a 12-month period were uninsured, while 28.1 percent were insured (Child and Adolescent Health Measurement Initiative, 2021).

DENTAL CARE OF CHILDREN ENTERING KINDERGARTEN

According to Stanford Medicine Children's Health (2022), a child's first dental visit should be at 12 months of age or six months after the first tooth comes in. In the current study, 21.1 percent of survey respondents indicated that their kindergartener had not seen a dentist in the past twelve months, which is a slight decrease from last year (22.0%) (See Figure 7.1).

Figure 7.1 Child's Dental Visit
2020-2021 n = 27907; 2021-2022 n = 28,108; 2022-2023 n = 25,246



8 MENTAL HEALTH

Many of Nevada's children have mental health conditions that require specialized treatment. It is important that these children have regular access to mental health services. This is particularly true for young children entering the elementary school system. Nationally, 7.7 million children and teens have at least one treatable mental health disorder, yet only half of these children receive treatment from a mental health care professional. State-level practices and policies may play a role as to why children do not receive needed treatment (Whitney & Peterson, 2019). In Nevada, 19.1 percent of children aged three to seventeen years have at least one mental health condition and only 46.8 percent of these children have received counseling or treatment (Child and Adolescent Health Measurement Initiative, 2021). Without access to mental health care providers to manage and treat their conditions, children with mental health conditions are more likely to experience learning difficulties and developmental delays (Baker et al., 2010; Scott et al., 2016).

Learning difficulties and developmental delays may continue to be exacerbated by the COVID-19 pandemic. Families might have experienced increased stress due to job loss, placing themselves and their families at risk as an essential worker, food insecurity and/or housing insecurity, and struggling to find childcare, all factors that can affect the overall well-being of children (American Psychological Association, 2020). It was reported that 65 percent of parents with children five to seven years of age felt that the pandemic made the 2019-2020 school year extremely stressful, and parents reported higher levels of stress related to the pandemic than non-parents (American Psychological Association, 2020). Children were physically isolated from their peers and might not have fully understood the reasoning behind the social restrictions and safety precautions in place, further exacerbating their stress (Nevada Division of Child and Family Services [DCFS], 2020). In addition, children might have experienced grief from losing loved ones or family members more often due to COVID-19 (DCFS, 2020).

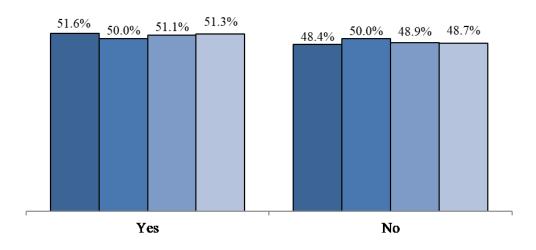
The survey results indicate that **9.0 percent of respondents have tried to access mental health services for their children**, which is a slight increase from 2021-2022 data (7.3%).

Of the 9.0 percent that attempted to access services, 51.3 percent reported having trouble obtaining them, a slight increase from the previous survey year (47.4%).

- The percentage of those having trouble accessing services was fairly similar across Clark (51.6%), the Rural Counties (51.1%), and Washoe (50.0%). (See Figure 8.1).
- The most common barriers provided by respondents regarding accessing mental health services, from most to least common, included: inability to get an appointment (waitlists and providers overbooking or not accepting patients), lack of providers, and insurance specific barriers.

Figure 8.1 Trouble Obtaining Mental Health Services by County

Clark n = 1,577; Washoe n = 316; Rural n = 325; Statewide n = 2,218



■ Clark County ■ Washoe County ■ Rural County ■ Statewide

Note. Percent only for those who tried to access services

9 WEIGHT AND HEALTHY BEHAVIORS

In the past three decades, the prevalence of childhood obesity in the U.S. has more than doubled in children and tripled in adolescents (Sanyaolu et al., 2019). Research suggests a significant link between high body mass index (BMI) values and type 2 diabetes (Ganz et al., 2014; Abbasi et al., 2017). Therefore, monitoring children's weight has become an important tool for analyzing potential health problems.

In our survey design, parents/guardians are asked to write-in their child's height and weight information so that a BMI value can be calculated for each child with valid height and weight responses. BMI values were calculated using the standard formula employed by the CDC and other health agencies:

$$BMI = [(Weight in pounds) / (Height in inches)^2] * 703$$

However, to increase the validity of the data, several strict guidelines were implemented for the calculation of BMI. First, if the respondent reported that the child was under the age of four or over the age of six, they were excluded from the analyses, as it is unlikely that kindergarteners would be outside of this age range. Age is an important factor because it is used to determine weight status category and is strongly correlated with height. Second, if a child's reported height was outside of the 95th percentile for the average height of four to six-year-olds (CDC, 2000), the child was excluded from the analysis. Finally, if a child's weight was reported to be under 20 pounds, the child was excluded from the analysis. The inclusion criteria resulted in 12,821 (42.5 percent of the entire sample) kindergarteners with a valid BMI value.

Once BMI was calculated, each child in the sample was assigned a weight status category based on CDC standards, which uses a child's age, gender, and BMI percentile. Table 9.1 outlines the BMI percentile ranges for each weight status category.

Table 9.1 Weight Status Categories by BMI Percentile Ranges

Weight Status Category	BMI Percentile Range
Underweight	BMI less than the 5 th percentile
Healthy Weight	BMI from the 5 th percentile to less than the 85 th percentile
Overweight	BMI from the 85 th percentile to less than the 95 th percentile
Obese	BMI equal to or greater than the 95 th percentile

Source: Centers for Disease Control and Prevention. (2022a). *About child & teen BMI*. Retrieved from https://www.cdc.gov/healthyweight/assessing/bmi/childrens bmi/about childrens bmi.html

For the purpose of this study, NICRP used ten different weight status formulas: one formula for females and one for males for each of the following ages: 4.0, 4.5, 5.0, 5.5, and 6.0. Table 9.2 outlines the calculations used to determine the weight status categories.

Table 9.2 Weight Status Category Calculations Based on BMI Values

		egery ememmens zusen		
Femal	es			
	Weight Status Categ	gory		
Age	Underweight	Healthy Weight	Overweight	Obese
4.0	0 < BMI < 13.725	$13.725 \le BMI < 16.808$	$16.808 \le BMI < 18.028$	BMI >= 18.028
4.5	0 < BMI < 13.614	$13.614 \le BMI \le 16.760$	$16.760 \le BMI \le 18.084$	BMI >= 18.084
5.0	0 < BMI < 13.527	$13.527 \le BMI < 16.796$	16.796 <= BMI < 18.240	BMI >= 18.240
5.5	0 < BMI < 13.465	13.465 <= BMI < 16.906	16.906 <= BMI < 18.486	BMI >= 18.486
6.0	0 < BMI < 13.428	13.428 <= BMI < 17.083	$17.083 \le BMI < 18.808$	BMI >= 18.808
Males				
	Weight Status Categ	gory		
Age	Underweight	Healthy Weight	Overweight	Obese
4.0	0 < BMI < 14.043	14.043 <= BMI < 16.935	16.935 <= BMI < 17.842	BMI >= 17.842
4.5	0 < BMI < 13.932	$13.932 \le BMI < 16.852$	$16.852 \le BMI < 17.829$	BMI >= 17.829
5.0	0 < BMI < 13.845	13.845 <= BMI < 16.839	16.839 <= BMI < 17.927	BMI >= 17.927
5.5	0 < BMI < 13.781	13.781 <= BMI < 16.891	16.891 <= BMI < 18.118	BMI >= 18.118
6.0	0 < BMI < 13.739	13.739 <= BMI < 17.003	17.003 <= BMI < 18.389	BMI >= 18.389

Source: Centers for Disease Control and Prevention (2001). Data Table of BMI-for-age Charts.

Retrieved from http://www.cdc.gov/growthcharts/html charts/bmiagerev.htm

Based on the calculated BMI for this year's sample, slightly more than half (51.3%) of the children were categorized as being a healthy weight which is a slight increase from last year (50.7%) (See Figure 9.1). However,

• 15.6 percent of children were underweight

 Washoe County had a larger percentage of children that were underweight (18.4%) as compared to Clark County and the Rural Counties (both at 15.1%) (See Appendix A, Table 10.1).

• 10.7 percent of children were overweight

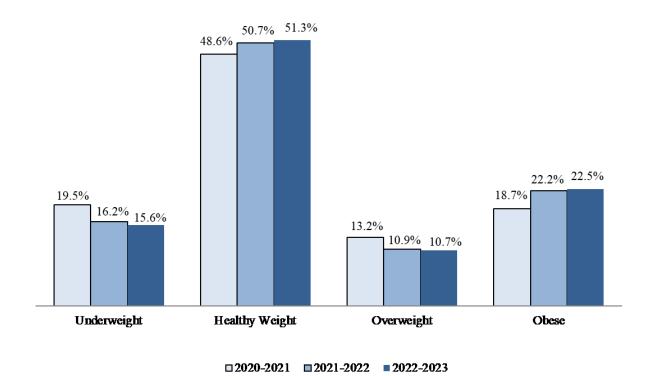
Washoe County had a larger percentage of children that were overweight (11.7%) as compared to the Rural Counties (11.1%) and Clark County (10.4) (See Appendix A, Table 10.1).

• 22.5 percent of children were obese

The Rural Counties had a smaller percentage of children that were obese (18.8%) as compared to Washoe County (23.1%) and Clark County (23.0%) (See Appendix A, Table 10.1).

The percentage of children that were overweight and underweight decreased this year as compared to last year, while the percentage of children at a healthy weight and children that were obese increased.

Figure 9.1 Child's Weight Status Category
2020-2021 n = 13,342; 2021-2022 n = 12,821; 2022-2023 n = 11,568



When comparing each child's race/ethnicity with their BMI, there are some differences in distributions across weight status categories for each race/ethnic group. It is important to note that the total number of respondents included in this race/ethnicity analysis is less than those in the above statistics on valid BMIs within the sample because some respondents did not provide information on race/ethnicity.

The distribution of race/ethnicity for children with valid BMIs varies slightly from the racial/ethnic demographics of the survey sample as a whole. The greatest discrepancy was for Caucasian children in that they are overrepresented in the BMI data, making up 30.6 percent of the total sample but 41.0 percent having a valid BMI. Hispanic children are underrepresented in that they make up 31.7 percent of the total sample but 21.9 percent have a valid BMI. Figure 9.2 illustrates the race/ethnicity data for children with a valid BMI.

5.8%

7.4%

6.2%

6.4%

41.0%

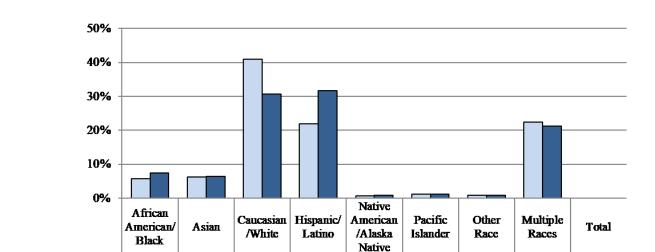
30.6%

□% w/Valid BMI

■% Total Sample

Figure 9.2 Race/Ethnicity of Participants with a Valid Body Mass Index

2022-2023 n = 11,569



As seen in Figure 9.3, the differences in BMI across racial/ethnic groups indicate the following:

21.9%

31.7%

0.6%

0.8%

1.2%

1.1%

0.8%

0.8%

22.4%

21.3%

100%

100%

- The largest percentage of children that were obese are Hispanic (32.3%), followed by Native American/Alaska Native (30.7%), and Pacific Islander (29.6%).
- The largest percentage of children that were underweight were identified as "Other Race" (46.4%) and the smallest percentage of children that were overweight were also identified as "Other Race" (3.6%).
- The largest percentage of children that were at a healthy weight are Caucasian (56.9%).

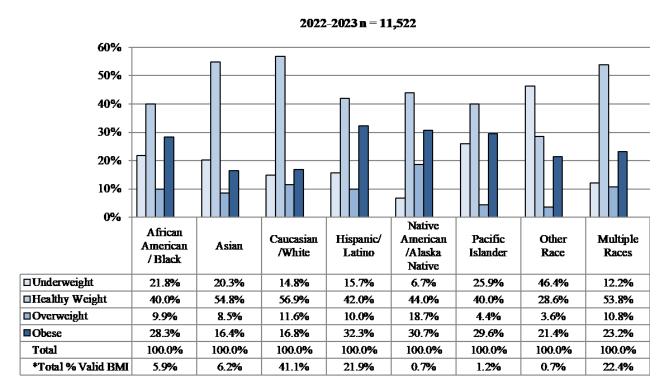


Figure 9.3 Child's Weight Status Category by Child's Race/Ethnicity

Note. *Indicates percentages are calculated out of the total number of Valid BMI responses in each race/ethnicity category.

BEHAVIORS RELATED TO HEALTHY WEIGHT IN YOUNG CHILDREN

Explanations for obesity in young children are related to several behavioral factors, including level of physical activity, television viewing, time spent playing video games, and diet. According to the CDC, physical inactivity can lead to energy imbalance, increase risks of cardiovascular diseases, increase the risk of developing type 2 diabetes, lead to low bone density, and increase the risk of multiple types of cancers. Approximately 24% of children six to seventeen years of age are participating in at least 60 minutes of physical activity everyday (CDC, 2020b). Therefore, the KHS assessed the frequencies of the following behaviors among children entering kindergarten: physical activity, TV viewing time, video game usage, and the consumption of juice, non-diet, and diet soda.

Physical Activity

Parents/guardians were asked to report the number of days per week their child is physically active for at least 60 minutes. For those that responded, almost half (46.9%) indicated that their child was physically active six to seven days a week for at least sixty minutes and 3.2 percent indicated that their child was not active during the week.

Figure 9.4 illustrates the relationship between weight status category and amount of physical activity.

- A very small percentage of children with a valid BMI were reported to engage in physical activity zero to one day a week (2.1%) and 17.7 percent reported activity two to three days per week.
- Overall, as days of physical activity per week increased, kindergarteners were less likely to be in the obese weight category.
- Children that were physically active less often (zero to three days per week) were more likely to be obese, as compared to children that were physically active throughout the week (four to seven days per week).

2022-2023 n = 11.567 60% 50% 40% 30% 20% 10% 0% 0-1 Days Per Week 2-3 Days Per Week 4-5 Days Per Week 6-7 Days Per Week □Underweight 21.6% 15.6% 15.0% 16.6% □Healthy Weight 47.7% 50.9% 49.7% 52.5% ■Overweight 5.8% 8.4% 9.3% 12.6% ■Obese 24.9% 24.0% 25.5% 19.9% * Total % Valid BMI 2.1% 17.7% 30.6% 49.7%

Figure 9.4 Child's Weight Status Category by Amount of Physical Activity per Week

Note. *Indicates percentages are calculated out of the total number of valid BMI responses in each category.

To gain a better understanding of the barriers that parents/guardians face regarding providing physical activities for their children, after indicating how many days a week their child was active, they were asked to indicate barriers to being more physically active. The most common barriers, accounting for 81.5 percent of the responses, included: weather, lack of time and/or a busy work schedule, lack of space, and asthma, allergies, or the child's health. Please note the response categories were not mutually exclusive; respondents were allowed to list multiple barriers.

Television Viewing and Use of Electronic Devices

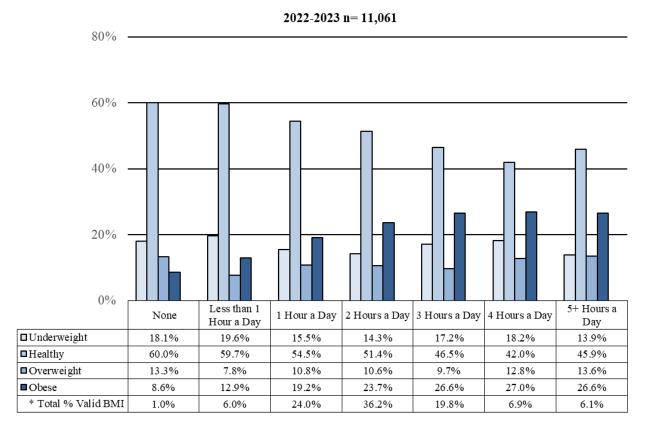
In the current study, more than half of respondents (57.4%) reported that their child spends two to three hours in front of a TV or electronic device watching TV, videos, or playing video games on an average weekday. On the weekend, more than half of children (53.5%) spend two to three hours in front of a TV or electronic device.

Table 9.3 Number of Hours Spent on Electronic Devices

	Average Weekday	Weekend
None	0.9%	0.6%
Less than 1 hour	5.9%	2.8%
1 hour	21.2%	9.6%
2 hours	35.4%	26.8%
3 hours	22.0%	26.7%
4 hours	7.6%	18.1%
5 or more hours	7.0%	15.4%

When examining the relationship between average number of hours that a child spends in front of a TV or electronic device on an average weekday and BMI (See Figure 9.5), as TV viewing and the use of electronic devices increases to four hours a day, the likelihood of a child being obese also increases. The largest percentage of children that are at a healthy weight do not watch TV or use electronic devices on an average weekday (60.0%).

Figure 9.5 Child's Weight Status Category by Hours Spent on Electronic Devices on an Average Weekday



Similarly, when examining the relationship between the average number of hours that a child spends in front of a TV or electronic device on the weekend and BMI (see Figure 9.6), the largest percentage of children that are at a healthy weight do not watch TV or use electronic devices on an average weekend (64.3%).

2022-2023 n = 11,129 70% 60% 50% 40% 30% 20% 10% 0% Less than 1 None 1 Hour 4 Hours 5+ Hours 2 Hours 3 Hours Hour □Underweight 21.4% 23.2% 15.6% 15.8% 15.7% 16.1% 14.5% ■Healthy 64.3% 45.7% 58.4% 52.8% 49.9% 47.8% 49.7% ■Overweight 7.1% 13.9% 7.2% 11.2% 10.4% 9.5% 12.0% ■Obese 7.1% 17.2% 18.9% 20.2% 23.9% 26.6% 23.8% Total 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 18.3% *Total % Valid BMI 0.4% 2.4% 8.7% 28.2% 26.0% 16.0%

Figure 9.6 Child's Weight Status Category by Hours Spent on Electronic Devices on an Average Weekend

Soda Consumption: Non-Diet Soda

According to the 2021 Nevada High School Youth Risk Behavior Survey (YRBS) Report, 14 percent of youth in Nevada drank a can, bottle, or glass of non-diet soda/pop at least one time per day in the seven days prior to administration of the survey (Anderson et al., 2022), which was below the 2019 national average of 15.1 percent (Merlo et al., 2020). To determine similar activity in children entering kindergarten, this same question on soda consumption was added to the survey starting in the 2011-2012 school year.

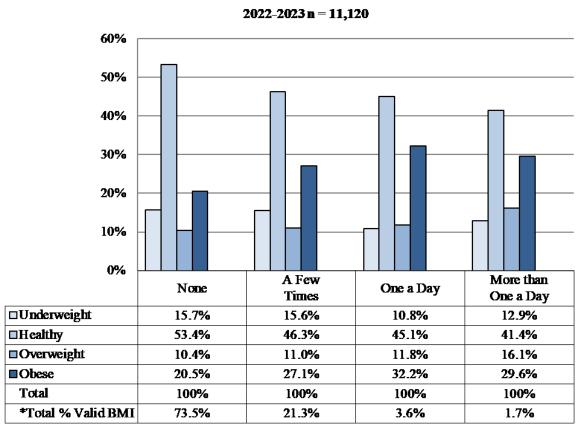
This year's results indicate that:

- The majority of children either did not drink any non-diet soda (69.0%) or drank some a few times per week (24.3%).
 - The percentage of children who did not drink any non-diet soda is smallest in the Rural Counties (68.1%) and is slightly larger in Clark County (68.8%) and Washoe County (70.9%) (See Appendix A, Table 10.1).
- A total of 4.9 percent of respondents reported that their child drank non-diet soda once a day and 1.8 percent indicated that their child drank non-diet soda more than once a day.

• A larger percentage of children in Clark County (7.0%) drank at least one non-diet soda a day, as compared to children in the Rural Counties (6.5%) and Washoe County (5.9%) (See Appendix A, Table 10.1).

Figure 9.7 illustrates children's weight status category by the number of non-diet sodas consumed in one week. Of the respondents with kindergarteners having a valid BMI, most reported that their child had less than one non-diet soda a day (94.8%). The largest percentage of children in the obese category drank one or more non-diet sodas a day (61.8%).

Figure 9.7 Child's Weight Status Category by Number of Non-Diet Sodas Consumed in a Week



Note. *Indicates percentages are calculated out of the total number of valid BMI responses in each category

Soda Consumption: Diet Soda

Similarly, the survey asked the parents/guardians to indicate the level of their kindergartener's consumption of diet soda products in the past seven days.

Results indicate that:

- The majority of children in the current study did not drink any diet soda (87.1%).
 - The percentage of children who did not drink any diet soda was smallest in the Rural Counties (85.5%) as compared to Washoe (86.9%) and Clark County (87.4%) (See Appendix A, Table 10.1).

- A total of 10.1 percent reported that their child drank diet soda a few times a week, 2.4 percent reported daily consumption, and 0.5 percent reported consumption of more than once a day.
 - In the Rural Counties, a larger percentage of children drank diet soda a few times a week (11.8%) as compared to children in Washoe County (10.6%) and Clark County (9.7%).
 - A larger percentage of children in Clark County reportedly drank diet soda at least once a day (3.0%) as compared to children in the Rural Counties (2.7%) and Washoe County (2.5%) (See Appendix A, Table 10.1).

When looking at children's weight status categories by the number of diet sodas drank in one week, children that drink more than one diet soda a day are more likely to be overweight as compared to those that drink diet soda a few times per week or once a day. However, it is difficult to project a relationship given that so few of the respondents reported their child drank diet soda either once a day or more than once a day. Therefore, these results should be used with caution (see Figure 9.8).

2022-2023 n = 10.880 60% 50% 40% 30% 20% 10% 0% More than A Few Times One a Day None One a Day □Underweight 15.3% 14.7% 23.7% 20.0% ■Healthy 52.8% 46.7% 22.6% 36.0% ■ Overweight 7.3% 44.0% 10.9% 7.5% ■ Obese 31.1% 46.3% 0.0% 21.0% Total 100% 100% 100% 100% *Total % Valid BMI 89.0% 9.2% 1.6% 0.2%

Figure 9.8 Child's Weight Status Category by Number of Diet Sodas Consumed in a Week

Note. *Indicates percentages are calculated out of the total number of valid BMI responses in each category.

Juice Consumption

Parents and childcare providers often perceive fruit juice as a healthy alternative to sodas and other sugary beverages for children. There has been an increase in the consumption of fruit juices by children over the past 30 to 40 years as well as the variety of types of juices available for purchase (Wojcicki & Heyman, 2012). The low levels of fiber and high sugar content of these products, even in 100 percent fruit juice, raise health issues for children (Heyman & Abrams,

2017; Wojcicki & Heyman, 2012). Research shows that excessive consumption of fruit juice among children contributes to obesity (Shefferly et al., 2016; Wojcicki & Heyman, 2012).

This year's results indicate that:

- The majority of children drank juice a few times a week (41.4%) or once a day (27.5%).
 - A larger percentage of children in Clark County drank juice once a day or more (47.1%) as compared to children in the Rural Counties (39.8%) and Washoe County (35.1%) (See Appendix A, Table 10.1).
- Overall, 14.2 percent reported that their child did not drink juice.
 - A larger percentage of children in Washoe County did not drink juice (19.4%) as compared to children in the Rural Counties (17.4%) and Clark County (12.6%) (See Appendix A, Table 10.1).

When comparing children's weight status category to the number of juice drinks consumed in one week, it appears that an increase in juice consumption is related to an increase in obesity (See Figure 9.9). However, it is difficult to project a relationship given the sample size of respondents in each category. Thus, results should be interpreted with caution.

2022-2023 n = 11.429 60% 50% 40% 30% 20% 10% 0% More than None A Few Times One a Day One a Day □Underweight 16.4% 15.1% 13.3% 20.9% ■ Healthy 59.8% 50.7% 53.7% 39.8% ■ Overweight 10.7% 9.9% 10.1% 13.1% 24.3% 22.9% 26.3% ■ Obese 13.1% *Total % Valid BMI 43.9% 26.7% 15.3% 14.2%

Figure 9.9 Child's Weight Status Category by Number of Juice Drinks Consumed in a Week

Note. *Indicates percentages are calculated out of the total number of valid BMI responses in each category.

WEIGHT AND HEALTHY BEHAVIORS

Infant Feeding Behaviors

Breastfeeding has been shown to have many health benefits for both the lactating person and the child. Breastfeeding has been associated with reduced risk of cancer, diabetes, obesity, and postpartum depression in the lactating person, and improved cognitive development and reduced risk of cancer, ear infections, gastrointestinal issues, allergies, SIDS, obesity, hypertension, cardiovascular disease, hyperlipidemia, and diabetes in the child (Binns et al., 2016; U.S. Department of Health and Human Services [US DHHS], 2011).

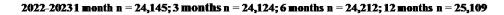
Starting in 2007, the CDC began issuing annual Breastfeeding Report Cards that provide both national and state-level data. According to the 2022 report card, Nevada is below the national average for babies exclusively breastfeeding through six months (U.S. =24.9%; NV =22.3%) and for babies exclusively breastfeeding through three months (U.S. =45.3%; NV =42.4%) (CDC, 2022b).

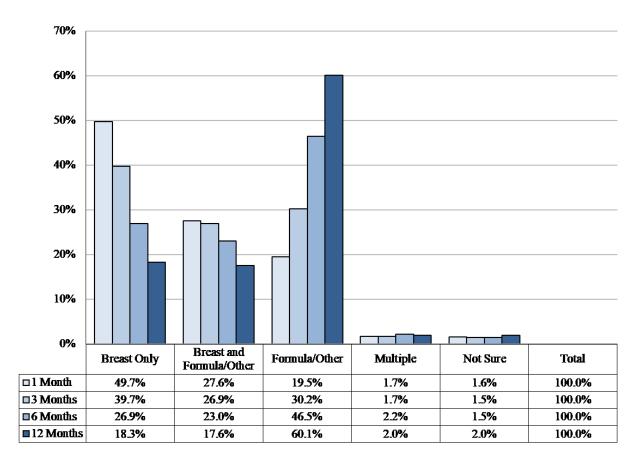
The Healthy People 2030 breastfeeding objectives aim to increase the proportion of infants who are breastfed at one year (54.1%), and exclusively breastfed through six months of age (42.4%) (US DHHS, 2021a; US DHHS, 2021b). According to the 2022-2023 KHS survey, 36.0 percent of incoming kindergartners were breastfed at twelve months with 18.3 percent being exclusively breastfed. At six months, 26.9 percent of children were exclusively breastfed.

It is important to note that there are many reasons why a child may not receive breast milk exclusively during the first six months such as low milk supply, trouble latching, or a plugged duct (US DHHS Office on Women's Health, 2011). In 2022-2023, of those who wrote in barriers to breastfeeding, the most frequently cited barriers, from most to least common, included lack of milk production, difficulties with latching, work or school, and medical issues with the baby.

As seen in Figure 9.10, 49.7 percent of respondents indicated that their child was breastfed exclusively at one month old.

Figure 9.10 Infancy Feeding Habits





The literature shows a link between breastfeeding and preventing obesity. Certain types of bacteria that help to prevent obesity are more likely to be present in babies that drink breast milk (McCarthy, 2018). Infants who were given breast milk from a bottle did have lower rates of obesity at 12 months; however, the lowest rates of obesity were seen in infants who received breast milk directly from the breast for the first three months of their life (McCarthy, 2018). Figure 9.11 illustrates child weight status categories by infant feeding behaviors. There are slightly larger percentages of children in the healthy weight category among those that were exclusively fed breast milk at all time points as compared to those that were fed both breast milk and formula/other or formula/other only.

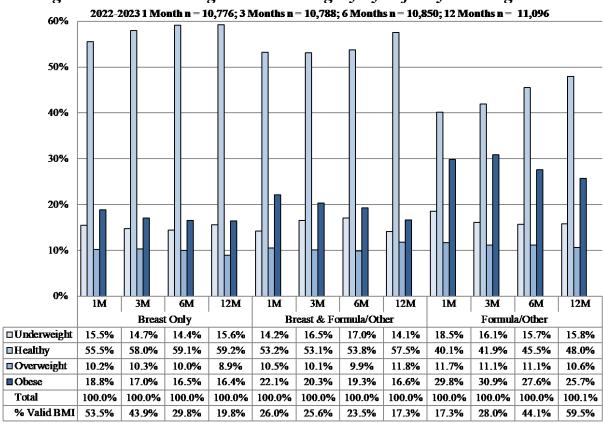


Figure 9.11 Child Weight Status Category by Infancy Feeding Habits

Note. Respondents were also given the response option to indicate Not Sure and some selected multiple responses. However, for the purposes of this graph, those response options were not included because of the low number of responses in each of those categories.

SUMMARY OF 2022-2023 WEIGHTED SURVEY RESULTS BY COUNTY

Table 10.1 below outlines the percentages of responses for the 2022-2023 school year survey results by Clark County, Washoe County, and the Rural Counties. Not all respondents answered every question on the surveys that were returned. All percentages calculated are based on the total weighted number of people answering the question, rather than the total number of people who completed a survey. In addition, percentages are represented by county(ies); therefore, percentages will total 100 percent within each county category and not across all county categories.

Table 10.1 Summary of 2022-2023 Weighted Survey Results by County

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Survey Participation		72.8	15.1	12.1
Demographic Information				
Gender of Kindergartener				
Male	49.2	48.5	51.8	49.7
Female	50.8	51.4	48.2	50.3
Other	0.0	0.1	0.0	0.0
Race/Ethnicity of Kindergartener				
African American/Black	7.4	9.5	1.8	1.5
Asian	6.4	8.0	3.0	0.9
Caucasian	30.6	22.9	44.1	59.6
Hispanic	31.7	34.2	30.0	18.5
Native American/ Alaska Native	0.8	0.5	1.5	1.6
Pacific Islander	1.1	1.2	1.1	0.4
Other Race	0.8	0.9	0.4	0.4
Multiple Races	21.3	22.7	18.1	17.1
Single Parent or Guardian	28.2	29.2	25.6	25.1
Average # of Children in Household (Standard Deviation)	2.46 (1.15)	2.44 (1.15)	2.52 (1.13)	2.52 (1.18)
Average # of Adults in Household (Standard Deviation)	2.16 (0.99)	2.20 (1.03)	2.06 (0.88)	2.00 (0.83)
Average Age of Mother/Guardian (Standard Deviation)	34.38 (6.85)	34.46 (6.95)	34.76 (6.23)	33.44 (6.90)
Average Age of Father/Guardian (Standard Deviation)	36.74 (7.96)	36.86 (8.15)	36.92 (7.19)	35.80 (7.67)

Table 10.1 Continued

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Annual Household Income of Survey Resp	ondents	(= == =================================	(= == ====)	(= ====================================
\$0-\$14,999	7.5	8.0	5.4	6.7
\$15,000-\$24,999	8.1	8.9	5.5	6.5
\$25,000-\$34,999	11.4	12.5	8.2	9.2
\$35,000-\$44,999	9.8	10.1	9.1	9.0
\$45,000-\$54,999	9.1	10.0	6.6	6.8
\$55,000-\$64,999	7.7	7.9	6.4	7.9
\$65,000-\$74,999	6.3	5.9	6.9	7.8
\$75,000-\$84,999	7.0	6.7	6.7	8.4
\$85,000-\$94,999	5.4	4.9	6.6	6.8
\$95,000+	27.8	25.0	38.5	31.0
Housing Tenure				
Renter-Occupied	51.4	54.4	46.9	39.2
Owner-Occupied	48.6	45.6	53.1	60.8
Household Smoking				
Someone in household smokes	12.8	12.6	9.6	17.2
Smoking allowed in home	1.9	2.2	0.6	1.3
Family Events				
None	34.6	34.5	36.4	33.1
Moved to a new home	18.5	18.2	17.9	20.7
Job Change	22.3	22.0	21.6	24.9
Divorce or Separation	5.6	5.5	4.7	7.8
Loss of job or income	10.9	11.8	8.1	8.5
New Child - Birth/Adopt/Foster	9.5	9.7	8.5	10.0
Serious Medical issues in the home	4.3	4.1	4.0	5.4
Death in the family	12.3	12.5	10.2	13.6
Traumatic Event/Disaster/Accident	3.1	3.0	2.8	3.8
Other	1.5	1.3	1.6	2.4
Not Enough Food				
Often true	3.4	3.8	2.2	2.6
Sometimes true	19.3	21.2	12.3	16.2
Never true	77.4	75.0	85.5	81.2

7F 1 1	1 1	Λ 1			1
Tab]	le I	V. I	Con	tını	uea

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Type of School Child Attended in the Past	t 12 Months		,	,
None/Stayed at Home	30.2	31.4	25.8	28.5
Friends/Family Care	4.8	5.0	4.5	3.8
Home-Based	6.2	6.1	5.1	7.8
School District Preschool	32.4	34.2	26.3	29.5
University Campus Preschool	0.7	0.5	1.0	1.9
Head Start	5.0	4.4	6.3	6.8
Other Facility/Center	17.1	14.8	27.8	17.8
Multiple	3.5	3.5	3.2	4.0
Average Preschool Hours of Attendance				
0 Hours	34.5	35.9	29.9	31.9
1-4 Hours	8.6	9.3	5.2	8.1
5-10 Hours	12.9	13.6	7.9	15.4
11-15 Hours	10.2	11.6	3.2	10.8
16-20 Hours	5.6	5.0	7.4	6.8
21-30 Hours	11.0	8.8	20.2	13.0
31-40 Hours	13.0	11.9	19.7	11.0
More than 40 Hours	4.2	3.9	6.5	3.0
Reasons Children Did NOT attend presch	ool (percenta	ge only of t	hose who st	ayed home
or were in the care of friends/family/neigh	_			
No Challenges / Wanted them				
home	51.3	51.1	53.7	49.6
Too expensive	21.3	21.8	20.6	18.7
Too far	4.2	3.9	4.8	4.8
Hours not convenient	10.2	11.0	8.8	6.7
No open spots	11.8	10.5	12.8	19.1
Other	14.9	14.9	13.9	15.9
If they could have attended, would they he	ave attended p	oart-time or	full time? (percentage
only of those who stayed home or were in	care of friend	ds/family/ne	eighbors)	_
Full Time	57.1	56.3	66.9	49.9
Part Time	29.0	29.2	21.8	36.9
No preschool	13.8	14.5	11.4	13.2
If they could have attended, what type of f	facility would	you have p	laced your c	child in?
(percentage only of those who stayed hom	e or were in o	care of frien	ds/family/n	eighbors)
Home-Based	15.6	15.7	15.2	15.2
Facility/Center	32.5	29.2	47.9	34.4
School District Preschool	51.9	55.1	36.8	50.4

Table 10.1 Continued

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Number of Days During the Past Week that	t Someone 1			(
None	3.2	2.9	3.9	3.9
1 day	4.9	4.8	5.6	4.4
2 days	10.1	9.5	11.7	12.0
3 days	14.7	13.9	16.3	17.0
4 days	13.8	13.6	12.9	16.1
5 days	19.0	20.6	14.7	15.4
6 days	6.8	7.0	6.7	6.0
7 days	27.5	27.8	28.2	25.0
Health Insurance Status and Access to Hea	ılth Care			
Applied for insurance for child using Nevada Health Link	14.5	15.2	11.6	14.1
Yes, child was approved	87.4	88.0	88.7	82.0
Health Insurance Type				
Uninsured	5.3	5.3	4.9	5.2
Private	47.5	44.3	57.6	54.1
Medicaid	34.3	37.3	25.4	27.4
Nevada Check-Up	4.1	4.5	4.1	2.3
Other	3.5	3.4	3.4	4.3
Multiple Types	5.3	5.2	4.7	6.7
Kindergartener Does NOT Have a Primary	Care Provi	der		
,	8.4	7.8	8.3	11.6
Types of Barriers Experienced When Tryin	g to Access	Health Car	·e	
Lack of Transportation	3.5	4.0	2.0	2.0
Lack of Insurance	5.9	6.2	5.2	4.9
Lack of Quality Medical Providers	7.8	7.5	5.3	12.8
Lack of Money/Financial Resources	8.6	9.2	5.9	8.2
Other Barriers	2.7	2.9	1.7	3.2
Know how to access support services	42.1	38.7	51.0	51.8
Difficulties Accessing Mental Health Service (percentage only for those who tried to access	•	_		
	51.3	51.6	50.0	51.1
Routine Care and Health of Kindergartene	r			
Has Not Had Routine Check-Up in the Last Year	9.5	9.4	8.5	11.5
Has Not Visited a Dentist in the Last Year	21.1	22.8	12.7	22.0

Table 10.1 *Continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Types of Medical Conditions Seen in	i Kindergartenei	rs		
None	65.0	64.6	67.8	64.3
ADD/ADHD	2.1	1.8	1.9	3.9
Allergies	16.3	17.8	11.1	13.5
Asthma	6.2	6.7	5.0	4.8
Autism	1.8	1.6	1.9	3.3
Cancer	0.0	0.0	0.0	0.1
Diabetes	0.1	0.2	0.1	0.0
Glasses/Contacts	5.3	5.3	4.8	6.1
Hearing Aid/Impairment	0.3	0.3	0.1	0.6
Heart Condition/Disorder	0.9	0.9	0.7	1.5
Mental Health Condition	0.4	0.3	0.4	0.9
Physical Disability	0.4	0.4	0.4	0.5
Seizures	0.6	0.6	1.1	0.2
Skin Condition	3.4	3.2	3.9	3.7
Speech Delays	7.1	6.5	8.4	8.9
Other Condition	3.0	3.0	2.7	3.0
Received a Developmental Screening	g in past 12 mon	ths		
	31.2	29.1	36.0	37.3
Weight and Health Behaviors				
Underweight	15.6	15.1	18.4	15.1
Healthy Weight	51.3	51.4	46.8	55.0
Overweight	10.7	10.4	11.7	11.1
Obese	22.5	23.0	23.1	18.8
Number of Days per Week that Child	d Has at Least 6	0 Minutes o	of Physical A	Activity
None	1.0	1.3	0.2	0.4
1 Day	2.3	2.6	1.2	1.8
2 Days	6.7	7.9	4.0	3.1
3 Days	13.1	14.4	10.7	8.0
4 Days	12.6	13.4	11.7	8.9
5 Days	19.3	19.8	17.4	18.3
6 Days	8.5	8.5	8.6	7.8
7 Days	36.7	32.2	46.3	51.7

		1 1	4	, •	1
Tab]	Α .			ntını	1101

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Hours of TV or Electronics on an	Average Weekday		(/	(1 11 1)
None	0.9	0.9	1.0	0.5
Less than 1	5.9	5.3	7.1	8.3
1 Hour	21.2	20.8	22.1	22.6
2 Hours	35.4	35.0	35.2	38.0
3 Hours	22.0	22.9	20.1	18.4
4 Hours	7.6	7.6	7.9	7.3
5 Hours or More	7.1	7.5	6.6	4.9
Hours of TV or Electronics on an	Average Weekend	l		
None	0.6	0.6	1.0	0.6
Less than 1	2.8	2.4	3.8	4.0
1 Hour	9.6	9.0	13.5	8.4
2 Hours	26.8	25.1	32.6	29.9
3 Hours	26.7	27.0	24.8	27.2
4 Hours	18.1	18.9	15.0	17.9
5 Hours or More	15.3	17.1	9.4	12.1
Number of Times Per Week the K	indergartener Dri	nks Non-Di	iet Soda	
None	69.0	68.8	70.9	68.1
A Few Times	24.3	24.3	23.2	25.4
Once a Day	4.9	5.2	3.7	4.9
More Than Once a Day	1.8	1.8	2.2	1.6
Number of Times Per Week the K	Lindergartener Dri	nks Diet So	da	
None	87.1	87.4	86.9	85.5
A Few Times	10.1	9.7	10.6	11.8
Once a Day	2.4	2.5	1.8	2.5
More Than Once a Day	0.5	0.5	0.7	0.2
Number of Times Per Week the K	Lindergartener Dri	nks Juice		
None	14.2	12.6	19.4	17.4
A Few Times	41.4	40.3	45.5	42.8
Once a Day	27.5	28.5	23.9	25.8
More Than Once a Day	16.9	18.6	11.2	14.0

Table 10.1 Continued

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Infancy Eating Habits at One Month				
Breast Only	49.7	46.4	60.2	55.8
Breast and Formula/Other	27.6	29.2	23.2	23.3
Formula/Other	19.5	20.9	14.0	17.7
Multiple	1.7	1.9	1.0	1.5
Not Sure	1.6	1.6	1.6	1.6
Infancy Eating Habits at Three Month	S			
Breast Only	39.7	36.9	49.3	44.4
Breast and Formula/Other	26.9	28.1	24.3	23.0
Formula/Other	30.2	31.6	23.4	30.3
Multiple	1.7	1.9	1.4	0.9
Not Sure	1.5	1.5	1.5	1.5
Infancy Eating Habits at Six Months				
Breast Only	26.9	24.7	34.8	30.0
Breast and Formula/Other	23.0	23.2	25.1	19.3
Formula/Other	46.5	48.4	36.8	47.2
Multiple	2.2	2.2	1.8	2.2
Not Sure	1.5	1.5	1.5	1.3
Infancy Eating Habits at Twelve Month	hs			
Breast Only	18.3	16.6	24.0	21.8
Breast and Formula/Other	17.6	17.6	20.2	14.3
Formula/Other	60.1	61.5	52.1	61.3
Multiple	2.0	2.2	2.0	1.1
Not Sure	2.0	2.1	1.7	1.5

COMPARISON OF SURVEY RESULTS BY YEAR

Table 10.2 below outlines the percentages of responses from the three most recent school year surveys (2019-2020, 2020-2021, and 2021-2022). Please note that for each survey year, not all respondents answered every question. All percentages calculated are based on the total weighted number of people answering the question, rather than the total number of people who completed a survey. In addition, the percentages for Table 10.2 represent percentages by year; therefore, for each response category, percentages will total 100 percent within each year and not across all years.

Table 10.2 Comparison of Survey Results by Year

	2020-2021	2021-2022	2022-2023
	(Year 13)	(Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Survey Participation by School District			
Clark County	72.5	73.6	72.8
Washoe County	17.8	15.1	15.1
Rural Counties	9.7	11.4	12.1
Demographic Information			
Gender of Kindergartener			
Male	52.3	49.6	49.2
Female	47.4	50.3	50.8
Other	0.2	0.0	0.0
Race/Ethnicity of Kindergartener			
African American/Black	5.3	7.3	7.4
Asian		5.4	6.4
Caucasian	43.1	31.5	30.6
Hispanic	23.3	31.7	31.7
Native American/Alaska Native	0.7	0.8	0.8
Pacific Islander		1.1	1.1
Other Race	0.8	0.8	0.8
Multiple Races	21.1	21.4	21.3
Single Parent or Guardian	24.7	27.8	28.2
Average # of Children in Household	2.50	2.49	2.46
(Standard Deviation)	(1.45)	(1.18)	(1.15)
Average # of Adults in Household	2.14	2.12	2.16
(Standard Deviation)	(1.09)	(0.94)	(0.99)
Average Age of Mother/Guardian	34.99	33.93	34.38
(Standard Deviation)	(6.47)	(6.78)	(6.85)
Average Age of Father/Guardian	37.36	36.39	36.74
(Standard Deviation)	(8.10)	(7.65)	(7.96)

Table 10.2 Continued

Table 10.2 Continued	2020-2021	2021-2022	2022-2023
	(Year 13)	(Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Annual Household Income of Survey Res	spondent		
\$0-\$14,999	9.5	7.7	7.5
\$15,000-\$24,999	8.8	9.2	8.1
\$25,000-\$34,999	10.4	12.4	11.4
\$35,000-\$44,999	8.5	10.7	9.8
\$45,000-\$54.999	7.9	8.4	9.1
\$55,000-\$64,999	6.6	7.0	7.7
\$65,000-\$74,999	7.2	6.6	6.3
\$75,000-\$84,999	7.2	7.0	7.0
\$85,000-\$94,999	6.2	5.3	5.4
\$95,000 +	27.7	25.9	27.8
Housing Tenure			
Renter-Occupied	46.2	52.0	51.4
Owner-Occupied	53.8	48.0	48.6
Household Smoking			
Someone in household smokes	13.1	12.6	12.8
Smoking allowed in home	1.2	1.1	1.9
Family Events			
Moved to a new home	17.5	20.2	18.5
Job Change	24.8	23.1	22.3
Divorce or Separation	5.9	4.8	5.6
Loss of job or income	28.6	15.8	10.9
New Child - Birth/Adopt/Foster	10.1	10.9	9.5
Serious Medical issues in the home	6.8	3.8	4.3
Death in the family	12.7	13.1	12.3
Traumatic Event/Disaster/Accident	4.9	2.6	3.1
Other	6.1	1.4	1.5
Not Enough Food			
Often true		2.2	3.4
Sometimes true		13.6	19.3
Never true		84.2	77.4

Table 10.2 Continued

Table 10.2 Continued	2020-2021	2021-2022	2022-2023
	2020-2021 (Year 13)	2021-2022 (Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Type of School Child Attended in the Pas	`	(= ====================================	(2 02 0020)
None/Stayed at Home	5.8	36.5	30.2
Friends/Family Care	4.0	4.8	4.8
Home-Based	25.8	8.5	6.2
School District Preschool	12.5	23.1	32.4
University Campus Preschool	5.1	0.7	0.7
Head Start	2.3	5.0	5.0
Other Facility/Care	28.7	17.0	17.1
Multiple	15.8	4.3	3.5
Average Hours of Preschool Attendance			
0 Hours	18.1	40.4	34.5
1-4 Hours	3.5	9.3	8.6
5-10 Hours	24.4	12.9	12.9
11-15 Hours	14.1	7.9	10.2
16-20 Hours	12.6	6.2	5.6
21-30 Hours	9.3	7.5	11.0
31-40 Hours	13.1	11.7	13.0
More than 40 Hours	4.9	4.0	4.2
Reasons Children Did NOT attend presch	hool*		
No Challenges / Wanted them home	34.5	36.5	51.3
Too expensive	18.7	19.3	21.3
Too far	2.8	2.6	4.2
Hours not convenient	5.9	7.3	10.2
No open spots	7.6	8.7	11.8
Other	8.0	25.2	14.9
If they could have attended, would they h	ave attended pa	rt-time or full ti	me?
Full Time	57.8	57.9	57.1
Part Time	32.3	28.2	29.0
If they could have attended, what type of	facility would y	ou have placed y	our child in?
Home-Based	12.6	19.1	15.6
Facility/Center	36.6	39.7	32.5
School District	50.9	41.2	51.9

	1 1	•	~ .	1
Lahle		•	Continu	on
I abic	10	•-	Commi	-u

Table 10.2 Continuea	2020-2021	2021-2022	2022-2023
	(Year 13)	(Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Number of Days During The Past Week th	at Someone Re	ad to Child	
None	2.6	3.2	3.2
1 day	5.0	5.2	4.9
2 days	8.1	11.8	10.1
3 days	14.6	16.6	14.7
4 days	12.0	13.8	13.8
5 days	17.7	18.9	19.0
6 days	4.8	5.4	6.8
7 days	35.2	25.1	27.5
Health Insurance Status and Access to He	alth Care	-	
Applied for insurance for child using Nevada Health Link	57.1	14.3	14.5
Yes child approved. % only of those who selected yes to applied for insurance using Nevada Health Link	83.1	85.9	87.4
Health Insurance Type			
Uninsured	5.4	5.9	5.3
Private	54.7	48.8	47.5
Medicaid	27.5	32.3	34.3
Nevada Check-Up	5.4	5.2	4.1
Other	2.9	3.7	3.5
Multiple Types	4.1	4.2	5.3
Race/Ethnicity of Uninsured Kindergarten	er		
African American/Black	2.8	3.6	3.6
Asian		5.5	4.6
Caucasian	4	2.9	2.8
Hispanic	10.9	11.0	9.4
Native American/Alaska Native	7.4	1.2	4.4
Pacific Islander		0.0	3.1
Other Race	9.6	4.7	13.1
Multiple Races	2.7	3.8	3.2

	1 1	•	~ .	1
Lahle		•	Continu	on
I abic	10	•-	Commi	-u

Table 10.2 Continued	2020-2021	2021-2022	2022-2023
	(Year 13)	(Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Annual Household Income of Uninsured	Kindergarteners		
\$0-\$14,999	14.7	13.7	15.4
\$15,000-\$24,999	16.9	13.7	11.3
\$25,000-\$34,999	18.6	16.0	18.1
\$35,000-\$44,999	11.9	13.6	7.1
\$45,000-\$54,999	9.4	10.4	12.4
\$55,000-\$64,999	4.4	9.7	10.2
\$65,000-\$74,999	6.8	7.4	9.8
\$75,000-\$84,999	4.7	5.4	4.9
\$85,000-\$94,999	5.9	3.2	1.7
\$95,000 +	6.8	6.7	9.0
Kindergartener Does Not Have a Primary	Care Provider		
	8.0	9.4	8.4
Types of Barriers Experienced When Trying	_	alth Care	
Lack of Transportation	3.2	2.6	3.5
Lack of Insurance	6.9	5.8	5.9
Lack of Quality Medical Providers	6.5	6.1	7.8
Lack of Money/Financial Resources	10.4	6.8	8.6
Other Barriers	2.1	1.7	2.7
Knows how to Access Support Services	50.2	45.2	42.1
Difficulties Accessing Mental Health Serv	ices for Kindergo	artener	
	44.1	47.4	51.3
Routine Care and Health Status of Kinder	gartener		
Kindergartener Has NOT Had Routine Check-Up In Past Year	13.2	11.6	9.5
Kindergartener Has NOT Visited Dentist in Past Year	23.9	22.0	21.1

T 1 1		1 1	•	~ ·	1
า ดกเ	ıe	10	<i>.</i>	Continue	П
1 40		10	•-		

	2020-2021 (Year 13)	2021-2022 (Year 14)	2022-2023 (Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Types of Medical Conditions Seen in	,	(= == ====)	(= == ====)
ADD/ADHD	2.3	1.7	2.1
Allergies	14.4	13.3	16.3
Asthma	5.0	5.1	6.2
Autism	2.1	1.4	1.8
Cancer	0.1	0.1	0.0
Diabetes	0.1	0.3	0.1
Glasses/Contacts	4.9	5.1	5.3
Hearing Aid/Impairment	0.5	0.3	0.3
Heart Condition/Disorder	1.0	1.0	0.9
Mental Health Condition	0.5	0.6	0.4
Physical Disability	0.6	0.5	0.4
Seizures	0.8	0.8	0.6
Skin Condition	3.6	2.6	3.4
Speech Delays	6.2	6.4	7.1
Other Condition	3.9	2.4	3.0
Received a developmental screening	in past 12 months		
	31.2	29.0	31.2
Kindergartener's Weight Status			
Underweight	19.5	16.2	15.6
Healthy Weight	48.6	50.7	51.3
Overweight	13.2	10.9	10.7
Obese	18.7	22.2	22.5
Number of Days per Week that Child	l Has at Least 60 Mi	nutes of Physica	l Activity
None	1.6	1.0	1.0
1 Day	1.7	2.7	2.3
2 Days	7.5	6.3	6.7
3 Days	14.7	12.3	13.1
4 Days	11.5	12.6	12.6
5 Days	18.5	18.5	19.3
6 Days	7.2	8.8	8.5
7 Days	37.4	37.7	36.7

	2020-2021 (Year 13)	2021-2022 (Year 14)	2022-2023 (Year 15)	
Survey Indicator	(Percent)	(Percent)	(Percent)	
Number of hours spent in front of a	a TV or electronic devi	ce watching TV	, videos, or	
playing video games - Average Wee	kday			
None	0.7	0.7	0.9	
Less than 1	5.3	6.3	5.9	
1 Hour	14.2	20.9	21.2	
2 Hours	29.0	35.5	35.4	
3 Hours	7.1	21.6	22.0	
4 Hours	15.0	8.8	7.6	
5 Hours or More	28.6	6.3	7.1	
Number of hours spent in front of a		e watching TV,	videos, or	
playing video games - Average Week				
None	1.2	0.6	0.6	
Less than 1	5.0	2.7	2.8	
1 Hour	8.7	9.6	9.6	
2 Hours	26.4	26.9	26.8	
3 Hours	25.5	26.8	26.7	
4 Hours	16.1	18.4	18.1	
5 Hours or More	17.2	14.9	15.3	
Number of Times Per Week the Kin	idergartener Drinks N	on-Diet Soda		
None	71.6	69.6	69.0	
A Few Times	20.9	23.0	24.3	
Once a Day	4.0	5.2	4.9	
More Than Once a Day	3.5	2.1	1.8	
Number of Times Per Week the Kin	ndergartener Drinks D	iet Soda		
None	88.3	86.3	87.1	
A Few Times	8.8	9.9	10.1	
Once a Day	1.9	3.1	2.4	
More Than Once a Day	1.0	0.7	0.5	
Number of Times Per Week the Kin	ndergartener Drinks Ji	uice		
None	18.5	13.8	14.2	
A Few Times	45.5	41.9	41.4	
Once a Day	22.9	28.0	27.5	
More Than Once a Day	13.1	16.3	16.9	

Table 10.2 Continued

Table 10.2 Conunuea	2020-2021	2021-2022	2022-2023
	(Year 13)	(Year 14)	(Year 15)
Survey Indicator	(Percent)	(Percent)	(Percent)
Infancy Eating Habits at One Month			
Breast Only	53.1	52.2	49.7
Breast and Formula/Other	26.0	26.6	27.6
Formula/Other	18.3	18.6	19.5
Multiple	0.4	1.3	1.7
Not Sure	2.3	1.3	1.6
Infancy Eating Habits at Three Months			
Breast Only	42.6	41.4	39.7
Breast and Formula/Other	25.8	25.4	26.9
Formula/Other	29.2	30.1	30.2
Multiple	0.5	1.8	1.7
Not Sure	2.0	1.3	1.5
Infancy Eating Habits at Six Months			
Breast Only	28.8	27.6	26.9
Breast and Formula/Other	23.3	22.6	23.0
Formula/Other	45.0	46.3	46.5
Multiple	0.8	2.3	2.2
Not Sure	2.2	1.3	1.5
Infancy Eating Habits at Twelve Months			
Breast Only	17.9	19.1	18.3
Breast and Formula/Other	19.5	16.7	17.6
Formula/Other	59.3	60.5	60.1
Multiple	0.5	1.9	2.0
Not Sure	2.8	1.7	2.0

APPENDIX B. SURVEY INSTRUMENT

T T) TYT T		
UNIX	Kind	ergarten Health Survey
21 1231		to Institute for Children's Research and Policy at the University of Nevada Las
Vegas, in partnership with the State of Nevada Department of He	aith and Hu	uman Services, and the local county school districts. The information from this
survey will be used to help understand the health of children enter entering kindergarten. Your responses to this survey will be confu	ring kinder Tential All	garten this year. You have been asked to porticipate because you have a child information from this survey will be used to discuss children's health on a
group level, not on an individual level. Please check this box if thi		
	Annual	household Does anyone in your household smoke? Yes No
Name of elementary school:	Income	: (check one) Is smoking allowed in your house? Yes No
Your HOME zip code:	☐ \$0 -\$14	4,999 0 -\$24,999 Have you experienced any of the following events in the last 12
Do you ☐ Rent your home or ☐ Own your home		0-\$34,999 months? (check all that apply)
Are you a single parent/guardian? ☐ Yes ☐ No		0 -\$44,999
Total # of children(0-17) in your household:		0-\$64,999 Divorce or separation New Child—Birth/Adopt/Foster
Total # of adults in your household (18+):		0-\$74,999 Death in the family Serious medical issues in the home
Age of child's mother/guardian:		0 -\$84,999
Age of child's father/guardian:	□\$95,00	
		LI COVID-15
Please answer the following questions for	the child	d that will be enrolled in kindergarten this year.
1. Child's age:		 Please select any barriers you have experienced when accessing health care for your child: (check all that apply)
2. Child's gender:		□ Lack of transportation □ Lack of insurance
3. Child's weight: pounds		☐ Lack of good medical providers ☐ Lack of money
4. Child's height:ft in. (12in = 1ft)		Other (specify):
5. Child's race / ethnicity:		NONE Have you ever tried to get mental or behavioral health
☐ African American/Black ☐ Hispanic / Latino		services for your child?
☐ Asian ☐ Pacific Islander ☐ Native American / Alaska ☐ Caucasian/White ☐ Other (please specify):	Native	If yes, have you had trouble getting services? □ No □ Yes (explain)
E cascasary write E outer (prease specify).		17. In general, how many days a week does your child do at least
Please select the type of medical insurance your child		60 minutes of physical activity? (circle one)
currently has: (Check all that apply) Medicaid Private (Employer/Union)		0 1 2 3 4 5 6 7
□ Nevada Check-Up □ Other		List barriers:
□ NONE/Uninsured		18. On an average weekday, about how many hours does this child usually spend
7. Have you or someone else:		in front of a TV or electronic device (e.g. computers, cell phones, handheld video games) watching TV, videos, or playing video games? (circle one)
Applied for Medicaid or other health plan for your child thro Silver State Exchange/NV Health Link? Yes No No		
If yes, was your child approved? Over ONG ONG		None Less than one 1 2 3 4 5+
8. Does your child have a primary care provider (regular		 On an average weekend, about how many hours does this child usually spend in front of a TV or electronic device (e.g. computers, cell phones, handheld
doctor, nurse practitioner, or physician's assistant)?	_	video games) watching TV, videos, or playing video games? (circle one)
In the past 12 months has your child visited a:	es 🗆 No	None Less than one 1 2 3 4 5+
Medical provider for a routine check-up (not an illness)?	res □No	20. During the past 7 days, how many times did your child drink a
Dentist?	(es □No	can, bottle, or glass of
10. Please select any medical conditions listed below that		A few Once a More than None times Day Once a Day
your child has: (Check all that apply)		Non-diet sods or pop (check one)
☐ ADD / ADHD ☐ Heart Condition/Disorder ☐ Allergies ☐ Mental Health Condition		Diet soda or pop (check one)
☐ Allergies ☐ Mental Health Condition ☐ Asthma ☐ Physical Disability		Fruit Juice (check one)
☐ Autism ☐ Seizures		21. During the past 7 days, how many days did you or someone in your family/
☐ Cancer ☐ Skin Condition		house read to your child? (circle one)
☐ Diabetes ☐ Speech Delays ☐ Hearing Aid/Impairment ☐ Vision Impairment /Glasses	/ Contacts	0 1 2 3 4 5 6 7
Other (specify) □ NONE		22. What type of pre-school did your child attend most often in the
11. Please check which one best describes what your child		past 12 months? (check one) Friends/Family/Neighbor care
drank at each time point:	Net	☐ School District/Charter Pre-school ☐University/College Campus Pre-school
Breast Breast & Formula/ Only Formula/Other Other	Not Sure	☐ Head Start ☐Other Facility/Center
1 Month (check one)		□ NONE / Stayed home 23. On average, how many hours per week did your child attend
3 Months (check one)		preschool?
6 Months (check one) 12 Months (check one)		□Zero □ 1-4 □ 5-10 □11-15 □16-20 □21-30 □31-40 □ 41+
List barriers to breastfeeding:		24. If your child did not attend preschool OR if they did not attend the school you
12. Has your child had a developmental screening (like the		preferred, hours preferred, ect, what were some of the reasons? (check all
Ages and Stages Questionnaire) in the past 12 months?		that apply): Too expensive Location too far Hours not convenient No open spots
☐ Yes ☐ No ☐ Not sure		□ Other
13. Do you know where or how to access support services		□None (No challenges or I wanted to keep them home)
and programs in your community to meet your child's/	e atri	25. What preschool options would have or did best fit your needs?
family's needs? (e.g.food/bills, parent classes, support group Yes	2, 512	1) (check one) full time part-time No Preschool
14. Within the past 12 months the food we bought just didn't i	ast and we	
didn't have money to get more. □Often true □Sometimes true □Never true		•
	DIVEN TO Y	OUR CHILD'S TEACHER BY OCTOBER 29, 2021
	Thank you fo	r your participation.
NICRP, Kindergarten Health Surv	ey, 4700 Ma	vey to your school's front office, or mail to: tryland Parkway, Box 453064, Las Vegas, NV 89119
For Overtional Concerns Contact: A	manda Hab	oush-Delove 702-895-1040 Amanda Haboush/Zuniv.edu

Cuestionario de Salud de Kinder ESTIMADO PADRE DE FAMILIA O GUARDIAN: La siguiente encuesta ha sido diseñada por el Nevada Institute for Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboraçión con el Centro de Salud del Sur de Nevada y los Distritos Escolares del Condado local. La inform adquirida de esta encuesta se utilizará para ayudar a comprender la solud de los niños que comienzan la escuela preescolar este año. Se le ha pedida participar porque usted tendrá un niño comenzando la escuela preescolar. Sus respuestas a esta encuesta serán confidenciales. Toda la información obtenida de esta encuesta será utilizada para discutir la salud de los niños a nivel de groupo, no individual. Por favor, aquí si esta información se puede Nombre de la escuela primaria: __ Ingreso anual Código postal de su CASA: S0-\$14,999 ¿Usted? 🗆 Renta su casa o es 🗆 Propietario de su casa S15,000 - \$24 Es usted padre/tutor soltero? ☐ Sí ☐ No □\$35,000 -\$44 Total de niños(as) (0-17) viviendo en su casa: S45,000 -\$54 Total de adultos (18+) viviendo en su casa: ☐ \$55,000 -\$64 S65,000 -\$74 Edad de la madre/tutor del niño: _____ ☐ \$75,000 -\$84 Edad del padre/tutor del niño: ____ ☐\$85,000 -\$94 ☐ \$95,000 ± Por favor conteste las siguentes preguntas sobre el 1. Edad del niño(a): 2. Sexo del niño(a): Masculino 🗆 Femenino 🗆 Otro 3. Peso del niño(a) : _____ íbres 4. Estatura del niño(a): _____ ft. ____ in. (12in. = 1 ft.) 5. Etnicidad del Niño(a) ☐ Afro Americano /Negro ☐ Hispano / Latino □ Asiático □ Isleño Pacifico □ Nativo Americano / Nativo de Alaska ☐ Caucásico/Blanco ☐ Otro (especifique): _ 6. Por favor seleccione el tipo de seguro medico que su nifio(a) tiese actualmente. (seleccione todas las que apliquen) | Medicaid | Privado (Empleador/Union) | Nevada Check-Up | Otto | NINGUNO/No asegurado 7. ¿Usted o alguien más: Aplico para Medicaid/otro plan de salud para su niño(a) a través del Silver State Exchange/NV Health Link? DS: DNo DNo se En caso que si, ¿fue su niño approvado? DS: DNo DNo se 8. ¿Su nifio(a) tiene un proveedor médico primario (doctor regular, enfermera o asistente médico)? 9. En los últimos 12 meses su nifio(a) ha visto a un: □ St □ No 10. Por favor, seleccione todas las condiciones médicas que tenga II ADD/ADHD □ Condición del corazón □ Condición de Salud Mental □ Discapacidad física □ Alergias □ Asma ☐ Autismo ☐ Convulsiones □ Condición de la piel □ Diahotos □ Retrasos en el habla □ Otdo/Discapacidad Anditiva □ Debilitación de la vision/ Lentes/ de Contacto □ NINGUNO □ Otro (especifique) _ 11. Por favor, seleccione que mejor describe lo que bebió su niño(a)

ual del ho								
uno)	Est	tá permit	tido fur	nar en :	su casa? (🛮 Sí 🗆 No		
99	На ехре	erimentac	do cualq	uiera de	los siguier	ites evento	s en los últ	imos
\$24,999	12 mes	es? (selec	cione to	das las o	que apliqu	en)		
\$34,999		ioen el t				nevo hogar	ciudad/pat	
44,999		cio o sepa				o/a—Nacin		
\$54,999		e en la fa				to temporal		
\$64,999	□Perdic	la de un t	rabajo o			blemas med		iogar
\$74,999 \$84,999	ingre	808	-		vento trau	matrico / de	sastre / acci	dente
94,999	□Otro e	wento im	portante	(especif	ione) :			
,54,555	COV				NINGUNO)		
el niño(crito e	n el kír	der este	año.		
(a)? □ Fa □ Fa □ O	(selecci alta de t alta de p	one toda ransportz roveedo: ecifique)	s las qu ición res méd	e apliqu	ien)	de salud p □ Falta de □ Falta de	aseguranz	
16								
						alud menta In	10	
de comportamiento para su niño(a)? □ St □ No En caso que si, ¿ha tenido problemas para obtener los servicios?								
		espicifiqu		OOJEHR	s para ou	ieller 105 S	-	
 ¿En general, ¿Cuantes días a la semana su niño(a) hace por lo menos 60 minutos de actividad física? (circulé uno) 								
•			2	3	4	5 6	7	
	Lista bar			-				
18. ¿En un día de la semana normal, ¿cuántas horas suele pasar su niño frente a un televisor o dispositivo electrónico (por ejemplo, computadoras, telefonos celulares, videojuegos portátiles) viendo televisión, videos o jugando videojuegos? (circule uno) Ninguna Menos de una 1 2 3 4 5 +								
	-			•	-		-	
19. ¿En un fin de semana normal, ¿cuántas horas suele pasar su niño frente a un televisor o dispositivo electrónico (por ejemplo, computadoras, telefonos celulares, videojuegos portáriles) viendo televisión, videos o jugando videojuegos? (circule uno) Ninguna Menos de una 1 2 3 4 5 +								
	ante los lla o vas		7 dias,	cuánta	s veces be	ebió su nii	io(a) una	
			N	inguno		Una vez		
Code		-27-12		_	Veces	al dia	vez al di	3
Soda reg		p? (elige op?(elige		H	- H	- H -	부	
Jugo de :	fruta/(eli	germo)		ŏ	ŏ	ŏ	- j	
21. Dura fami	unte los lia/casa	último s le levó a	7 dias , su niñ	cuánta va? (c	s días ust irculé uno	ed o algui o)	en en su	
0		1	2	3	4	5	6	7
22. ¿A q los i	ue tipo d Utimos l	ie escuel 2 masas?	a prees (select	colar at cione ur	endio su n 10)	iño(a) ma	s a menud	o en

¿Alguien en su hogar fuma? □ ≦í □ No

Lista de barreras al amamantar:

Pecho

en cada etapa:

Un Mes (elige uno)

3 Meses (elige uno)

6 Meses (elige uno) 12 Meses (elige uno)

12. ¿Su niño(a) ha tenido una evaluación del desarrollo (como el Cuestionario de Edades y Etapas) en los últimos 12 meses?
□ Sí □ No □ No Se

Pecho:

Fornmla/Ótro

- 13. ¿Sabe usted dónde o cómo accesar servicios y programas de apoyo en su comunidad para satisfacer las necesidades de sus niños/familia? (e.g. asistencia de gasto en alimentos, clases de padres, grupos de apoyo, etc.)

 □ Si □ Un Poco □ No
- En los últimos 12 meses, la comida que compramos simple-mente no duró y no teniamos dinero para obtener más. ☐ A menudo cierto ☐ A veces cierto ☐ Nunca es cierto
- horas preferido, etc., ¿cuales fueron algunas de las razones? (seleccione todas las que apliquen) : □ Demasiado caro □ Localización demasiado lejos □ Horas no convenientes

24. Si su niño(a) no asistió el preescolar, o si no asistió el preescolar su preferido.

23. ¿En promedio, cuántas horas por semana asistió su niño(a) al

□ Al cuidado de Amigo/Familiar/Vecino □ Presscolar Basada en Casa
□ Presscolar del Distrito Escolar □ Presscolar de al Universida
□ Head Start □ Otro Centro

□ Cero □ 1-4 □ 5-10 □11-15 □16-20 □ 21-30 □31-40 □ 41+

☐ Preescolar de al Universidad ☐ Otro Centro

- ☐ No hay espacios abiertos ☐ Otro _
- □ Ninguno, sin retos o querta mantenerlo(a) en casa

☐ Ninguna/Permaneció en la Casa

25. ¿Cual optiones que más preferiría or que más prefiere ? (seleccione uno) □ tiempo completo □ tiempo parcial

POR FAVOR DEVUELVA ESTE CUESTIONARIO AL MAESTRO(A) DE SU NIÑO(A) ANTES DEL VIERNES, OCTUBRE 29, 2021

Gracias por su participación.

Gracias por su participación.

TEACHERS: Please return the survey to your school's front office, or mail to NICRP, Kindengarten Health Survey, 4700 Maryland Pkwy, 453064, Las Vegas, NV 89119

¿Preguntas? Contactar a: Auranda Haboush-Deloy 702-895-1040 Amanda Haboush@univ.odu

- Abbasi, A., Juszczyk, D., van Jaarsveld, C. H., & Gulliford, M. C. (2017). Body mass index and incident type 1 and type 2 diabetes in children and young adults: A retrospective cohort study. *Journal of the Endocrine Society*, *I*(5), 524-537. Retrieved from https://academic.oup.com/jes/article/1/5/524/3754347
- Alexander, D., & Currie, J. (2017). Are publicly insured children less likely to be admitted to hospital than the privately insured (And does it matter)? *Economics and human biology, 25,* 33–51. Retrieved from https://doi.org/10.1016/j.ehb.2016.10.005
- Alker, J., & Pham, O. (2018). *Nation's progress on children's health coverage reverses course*. Washington: Georgetown University Center for Children and Families. Retrieved from https://ccf.georgetown.edu/2018/11/21/nations-progress-on-childrens-health-coverage-reverses-course/
- Alker, J., & Roygardner, L. (2019). *The number of uninsured children is on the rise*. Washington: Georgetown University Center for Children and Families. Retrieved from https://ccf.georgetown.edu/2019/10/29/the-number-of-uninsured-children-in-on-the-rise-acs/
- Allen, C. W., Diamond-Myrsten, S., & Rollins, L. K. (2018). *School absenteeism in children and adolescents*. American Family Physician. Retrieved from https://www.aafp.org/afp/2018/1215/p738.html
- American Psychological Association (2020). *Stress in America™ 2020: A national mental health crisis*. Retrieved from https://www.apa.org/news/press/releases/stress/2020/report-october
- Anderson, M., Brandon, K., Zhang, F., Peek, J., Clements-Nolle, K., Yang, W. (2022). University of Nevada, Reno School of Public Health and State of Nevada, Division of Public and Behavioral Health. 2021 Nevada High School Youth Risk Behavior Survey (YRBS) Report. Retrieved 7/5/23 from: https://scholarworks.unr.edu/handle/11714/4983
- Artiga, S., Tolbert, J., & Orgera, K. (2020). *Hispanic people are facing widening gaps in health coverage*. Retrieved from https://www.kff.org/policy-watch/hispanic-people-facing-widening-gaps-health-coverage/
- Attendance Works. (2022). *How many students are chronically absent?* Attendance Works. Retrieved from https://www.attendanceworks.org/how-many-students-are-chronically-absent/
- Baker, B. L., Neece, C. L., Fenning, R. M., Crnic, K. A., & Blacher, J. (2010). Mental disorders in five-year-old children with or without developmental delay: Focus on ADHD. *Journal of Clinical Child and Adolescent Psychology*, 39(4), 492-505. Retrieved from https://www.tandfonline.com/doi/full/10.1080/15374416.2010.486321
- Balfanz, R., & Byrnes, V. (2012). The importance of being in school: A report on absenteeism in the nation's public schools. Baltimore: Johns Hopkins University Center for Social Organization of Schools. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/west/relwestFiles/pdf/508 Chronic Absenteeism Natl Summary Balf anz Byrnes 2012.pdf
- Beckwith, Saladino, C. J., & Brown, William E., Jr. (2020). *Child Food Insecurity in Nevada Counties, 2018*. The Lincy Institute and Brookings Mountain West. Retrieved from https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1005&context=bmw_lincy_health
- Binns, C., Lee, M., & Low, W. Y. (2016). The long-term public health benefits of breastfeeding. *Asia Pacific Journal of Public Health*, 28(1), 7-14. Retrieved from https://journals.sagepub.com/doi/10.1177/1010539515624964?url_ver=Z39.88-2003&rfrid=ori:rid:crossref.org&rfr dat=cr pub%20%200pubmed

- Bisgaier, J., & Rhodes, K. V. (2011). Auditing access to specialty care for children with public insurance. *New England Journal of Medicine*, 364(24), 2324-2333. Retrieved from https://www.nejm.org/doi/full/10.1056/nejmsa1013285
- Bunch, L. N. & Bandekar, A. U. (2021). *Changes in children's health coverage varied by poverty status from 2018 to 2020*. Census.gov. Retrieved from https://www.census.gov/library/stories/2021/09/uninsured-rates-for-children-in-poverty-increased-2018-2020.html
- Cecil, E.V., Bottle, A., Cowling, T. E., Majeed, A., Wolfe, I., & Saxena, S. (2016). Primary care access, emergency department visits, and unplanned short hospitalizations in the UK. *Pediatrics*, *137*(2), e20151492. Retrieved from https://publications.aap.org/pediatrics/article/137/2/e20151492/52689/Primary-Care-Access-Emergency-Department-Visits
- Center for Medicaid & CHIP Services. (2022a). *October 2022 Medicaid & CHIP Enrollment Data Highlights*.

 Centers for Medicare & Medicaid Services. Retrieved from https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html
- Center for Medicaid & CHIP Services (2022b). *October 2022 Medicaid and CHIP Enrollment Trends Snapshot*. [PDF]. Centers for Medicare & Medicaid Services. Retrieved from https://www.medicaid.gov/medicaid/national-medicaid-chip-program-information/downloads/october-2022-medicaid-chip-enrollment-trend-snapshot.pdf
- Center on Society and Health. (2014). Why education matters to health: Exploring the causes. [Issue Brief]. Virginia Commonwealth University. Retrieved from https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html
- Center on the Developing Child. (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. [PDF]. Retrieved from http://www.developingchild.harvard.edu
- Centers for Disease Control and Prevention. (2000). *Clinical growth charts: Children 2 to 20 years*. Retrieved from https://www.cdc.gov/growthcharts/clinical_charts.htm
- Centers for Disease Control and Prevention. (2001, August 23). *Data Table of BMI-for-age Charts*. Retrieved from http://www.cdc.gov/growthcharts/html charts/bmiagerev.htm
- Centers for Disease Control and Prevention. (2018). *Smoking and tobacco use: Health Effects*. Retrieved from https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm
- Centers for Disease Control and Prevention. (2020a). *Developmental monitoring and screening*. Retrieved from https://www.cdc.gov/ncbddd/childdevelopment/screening.html
- Centers for Disease Control and Prevention. (2020b). *Physical Activity Facts*. Retrieved from https://www.cdc.gov/healthyschools/physicalactivity/facts.htm
- Centers for Disease Control and Prevention. (2021). *Infants (0-1 years)*. Retrieved from https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/infants.html
- Centers for Disease Control and Prevention. (2022a). *About child & teen BMI*. Retrieved from https://www.cdc.gov/healthyweight/assessing/bmi/childrens bmi/about childrens bmi.html
- Centers for Disease Control and Prevention. (2022b). Breastfeeding report card United States, 2022. Retrieved from: https://www.cdc.gov/breastfeeding/data/reportcard.htm

- Centers for Disease Control and Prevention. (2022c). *Early Brain Development and Health*. Retrieved from https://www.cdc.gov/ncbddd/childdevelopment/early-brain-development.html
- Centers for Disease Control and Prevention. (2022d). *Health problems caused by secondhand smoke*. Retrieved from https://www.cdc.gov/tobacco/secondhand-smoke/health.html
- Centers for Disease Control and Prevention. (2022e). *Preventing exposure to secondhand smoke in the home*. Retrieved from https://www.cdc.gov/tobacco/secondhand-smoke/home.html
- Child and Adolescent Health Measurement Initiative. (2021). 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 02/12/23 from www.childhealthdata.org
- Children's Bureau. (2017). *The Importance of Reading to Your Children*. Retrieved from https://www.all4kids.org/news/blog/the-importance-of-reading-to-your-children/
- Chun, Y., & Grinstein-Weiss, M. (2020, December 18). *Housing inequality gets worse as the COVID-19 pandemic is prolonged*. Brookings. Retrieved from https://www.brookings.edu/blog/up-front/2020/12/18/housing-inequality-gets-worse-as-the-covid-19-pandemic-is-prolonged/
- Cincinnati Children's. (2020). *Cognitive development*. Retrieved from https://www.cincinnatichildrens.org/health/c/cognitive
- Cohen, S. D. (2017). Three principles to improve outcomes for children and families. Science to Policy and Practice. Center on the Developing Child at Harvard University. Retrieved from https://developingchild.harvard.edu/resources/three-early-childhood-development-principles-improve-child-family-outcomes/
- Cohodes, S., Grossman, D., Kleiner, S. & Lovenheim, M. (2014). The effect of child health insurance access on schooling: Evidence from public insurance expansions. *Journal of Human Resources*, *51*(3), 727-759. Retrieved from https://www.jstor.org/stable/26449870?seq=1
- Coley, R. L., Kull, M., Leventhal, T., & Lynch, A. D. (2014). Profiles of housing and neighborhood contexts among low-income families: Links with children's well-being. Cityscape. *A Journal of Policy Development and Research 16*(1), 37-60. Retrieved from https://www.jstor.org/stable/26326857?seq=1
- Cooper, D., and Luengo-Prado, M. (2014). *House price growth when children are teenagers: A path to higher earnings?* Federal Reserve Bank of Boston Working Papers, 13-14. Retrieved from https://ideas.repec.org/p/fip/fedbwp/14-13.html.
- Cossman, R. E., Cossman, J. S., Rogers, S., McBride, D., Song, X., Sutton, L., & Stubbs, M. (2014). Access to primary care physicians differs by health insurance coverage in Mississippi. *Southern Medical Journal*, 107(2), 87-90. Retrieved from https://www.researchgate.net/publication/260020318 Access to Primary Care Physicians Differs by H ealth Insurance Coverage in Mississippi
- Ellen, I.G., & Glied, S. (2015). Housing, Neighborhoods, and Children's Health. *The Future of Children, 25*(1), 135–153. Retrieved from https://muse.jhu.edu/article/641197
- Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science* 16(2), 234-248. Retrieved from https://onlinelibrary.wiley.com/doi/10.1111/desc.12019

- Flores, G., Lin, H., Walker, C., Lee, M., Currie, J. M., Allgeyer, R. & Massey, K. (2017). The health and healthcare impact of providing insurance coverage to uninsured children: A prospective observational study. *BMC Public Health 17*(533), 553. Retrieved from https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4363-z
- Fronstin, P., & Woodbury, S. A. (2020). *How many Americans have lost jobs with employer health coverage during the pandemic?* The Commonwealth Fund. Retrieved from https://www.commonwealthfund.org/publications/issue-briefs/2020/oct/how-many-lost-jobs-employer-coverage-pandemic.
- Gaitán, V. (2019, January 2). How Housing Affects Children's Outcomes. Retrieved from https://housingmatters.urban.org/articles/how-housing-affects-childrens-outcomes
- Ganz, M. L., Wintfeld, N., Li, Q., Alas, V., Langer, J., & Hammer, M. (2014). The association of body mass index with the risk of type 2 diabetes: A case-control study nested in an electronic health records system in the United States. *Diabetology & Metabolic Syndrome*, 6, 50. Retrieved from https://dmsjournal.biomedcentral.com/articles/10.1186/1758-5996-6-50
- Georgetown University Center for Children & Families. (2022). *Children's Health Coverage in Nevada*. Children's Health Care Report Card. Retrieved from https://kidshealthcarereport.ccf.georgetown.edu/states/nevada/
- Guarnizo-Herreño, C. C., Lyu, W., & Wehby, G. L. (2019). Children's oral health and academic performance: Evidence of a Persisting Relationship Over the Last Decade in the United States. *The Journal of Pediatrics*, 209, 183-189. Retrieved from https://www.sciencedirect.com/science/article/pii/S0022347619301350
- Harkness, J. & Newman, S. (2003). Differential effects of homeownership on children from higher- and lower-income families. *Journal of Housing Research*, *14*(1), 1-19. Retrieved from https://www.jstor.org/stable/44944772
- Heyman, M. B., & Abrams, S. A. (2017). Fruit juice in infants, children, and adolescents: Current recommendations. *Pediatrics, 139*(6), e20170967. Retrieved from https://publications.aap.org/pediatrics/article/139/6/e20170967/38754/
- Huntley, A., Lasserson, D., Wye, L., Morris, R., Checkland, K. England, H. ... & Purdy, S. (2014). Which features of primary care affect unscheduled secondary care use? A systematic review. *BMJ Open*, 4, e004746. Retrieved from https://bmjopen.bmj.com/content/4/5/e004746.full
- Jacob, B. A., & Lovett, K. (2017, July 27). *Chronic absenteeism: An old problem in search of new answers*.

 Brookings. Retrieved from https://www.brookings.edu/research/chronic-absenteeism-an-old-problem-in-search-of-new-answers/
- Kaiser Family Foundation. (2019). Uninsured rates for the nonelderly by race/ethnicity. Retrieved from https://www.kff.org/uninsured/state-indicator/rate-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D
- Keisler-Starkey, K. & Bunch, L. N. (2021). Health Insurance Coverage in the United States: 2020, U.S. Government Publishing Office, Washington, DC. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2021/demo/p60-274.pdf
- Kimbro, & Denney, J. T. (2015). *Transitions Into Food Insecurity Associated With Behavioral Problems And Worse Overall Health Among Children*. Health Affairs, 34(11), 1949–1955. Retrieved from https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2015.0626

- Lee, Scharf, R. J., & DeBoer, M. D. (2018). Association between kindergarten and first-grade food insecurity and weight status in U.S. children. Nutrition (Burbank, Los Angeles County, Calif.), 51-52, 1-5. Retrieved from https://doi.org/10.1016/j.nut.2017.12.008
- Levy, D. E., Winickoff J. P., Rigotti N. A. (2011). School absenteeism among children living with smokers. *Pediatrics*, 128(4), 650-6. Retrieved from https://publications.aap.org/pediatrics/article/128/4/650/30703
- Masarik, A., & Conger, R. (2017). Stress and child development: A review of the family stress model. *Current Opinion in Psychology, 13*, 85-90. Retrieved from https://www.sciencedirect.com/science/article/pii/S2352250X16300549
- McCarthy, C. (2018). *The real link between breastfeeding and preventing obesity*. Harvard Health Publishing Harvard Medical School. Retrieved from https://www.health.harvard.edu/blog/the-real-link-between-breastfeeding-and-preventing-obesity-2018101614998
- Meade, J. (2021). Mental health effects of the COVID-19 pandemic on children and adolescents. *Pediatric Clinics of North America*, 68(5), 945–959. Retrieved from https://doi.org/10.1016/j.pcl.2021.05.003
- Merianos, A. L., Jandarov, R. A., & Mahabee-Gittens, E. M. (2018). Adolescent tobacco smoke exposure, respiratory symptoms, and emergency department use. *Pediatrics*, *142*(3), e20180266. Retrieved from https://pediatrics.aappublications.org/content/142/3/e20180266
- Merlo, C. L., Jones, S. E., Michael, S. L., Chen, T. J., Sliwa, S. A., Lee, S. H., Brener, N. D., Lee, S. M., & Park, S. (2020). Dietary and physical activity behaviors among high school students youth risk behavior survey, United States, 2019. *MMWR Supplements*, 69(1), 64–76. Retrieved from https://doi.org/10.15585/mmwr.su6901a8
- Mohammed, I & Amponsah, O. (2018). Predominant factors contributing to low reading abilities of pupils at Elsie Lund Basic School in the Tamale Metropolis, Ghana. *African Education Research Journal*, *6*(4), 273-278. Retrieved from https://files.eric.ed.gov/fulltext/EJ1208309.pdf
- National Center for Education Statistics. (2021). Fast facts child care. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=4#:~:text=Among%20children%20in%20a%20weekly,to%20them%20(nonrelative%20care).
- National Low Income Housing Coalition. (2018). Study links housing instability to increased child and caregiver health risks. Retrieved from https://nlihc.org/resource/study-links-housing-instability-increased-child-and-caregiver-health-risks
- Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2018). A double dose of disadvantage: Language experiences for low-income children in home and school. *Journal of Educational Psychology*, 110(1), 102–118. Retrieved from https://doi.org/10.1037/edu0000201
- Nevada Division of Child and Family Services (DCFS; 2020). COVID-19 Impacts on Children NVPeds White Paper Series Issue 2. Retrieved from https://nic.unlv.edu/wp-content/uploads/2023/09/COVID19-Impacts-on-Children-NVPeds-Issue-2 9.2.21 ADA.pdf
- Nevada State Demographer (2023). Nevada county, age, sex, race, and Hispanic origin estimates and projections 2000-2041. Estimates from 2000 to 2021 and Projections from 2022 to 2041. Reno, NV. Retrieved from https://tax.nv.gov/uploadedFiles/taxnvgov/Content/TaxLibrary/2022_ASRHO_Estimates_and_Projections.pdf
- Office of the Surgeon General (2021). *Protecting youth mental health: The U.S. Surgeon General's advisory.* [PDF]. U.S. Department of Health & Human Services. Retrieved from https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf

- Okereke, C., Johnson, L., & Flor, L. (2021, May 27). *Unknowing victims: The risk of secondhand smoke exposure during COVID lockdowns*. Think Global Health. Retrieved from https://www.thinkglobalhealth.org/article/unknowing-victims.
- Opportunity Finance Network. (2022). Addressing affordable housing challenges in the midst of COVID-19 [PDF]. Retrieved from https://cdn.ofn.org/uploads/2022/02/24092816/COVID-Proposal-Intermediary-Collaboration.pdf
- Pourat, N., Davis, A. C., Chen, X., Vrungos, S., & Kominski, G. F. (2015). In California, primary care continuity was associated with reduced emergency department use and fewer hospitalizations. *Health Affairs*, 34(7): 1113-1120. Retrieved from https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1165
- Rabinowicz, S., Leshem, E., and Pessach, I. M. (2020). COVID-19 in the pediatric population- review and current evidence. *Current Infectious Disease Report*, 22 (11). Retrieved from https://link.springer.com/article/10.1007/s11908-020-00739-6
- Radley, D. C., Collins, R. C., & Hayes, S. L. (2019). 2019 Scorecard on state health system performance. The Commonwealth Fund. Retrieved from https://2019scorecard.commonwealthfund.org/state/nevada
- Ruff, R., Senthi, S., Susser, S., & Tsutsui, A. (2018). Oral health, academic performance, and school absenteeism in children and adolescents: A systematic review and meta-analysis. *The Journal of the American Dental Association* (1939), 150(2), 111-121.e4. Retrieved from https://doi.org/10.1016/j.adaj.2018.09.023
- Sandel, M., Sheward, R., de Cuba, S. E., Coleman, S. M., Frank, D. A., Chilton, M., & Ochoa, E. (2018). Unstable housing and caregiver and child health in renter families. *Pediatrics, 141*(2), e20172199. Retrieved from https://childrenshealthwatch.org/wp-content/uploads/Unstable-Housing-and-Caregiver-and-Child-Health-in-Renter-Families.pdf
- Sanyaolu, A., Okorie, C., Qi, X., Locke, J., & Rehman, S. (2019). Childhood and adolescent obesity in the United States: A public health concern. *Global pediatric health*, *6*, 2333794X19891305. Retrieved from https://journals.sagepub.com/doi/full/10.1177/2333794X19891305
- Sawhill, I., & Karpilow, Q. (2015). How much could we improve children's life chances by intervening early and often? [Issue Brief]. Center on Children and Families at the Brookings Institution. Retrieved from http://www.brookings.edu/~/media/research/files/papers/2014/07/improve_child_life_chances_interventions_sawhill.pdf
- Sciaraffa, M. A., Zeanah, P. D., & Zeanah, C. H. (2018). Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal*, 46(3), 343-353. Retrieved from https://link.springer.com/article/10.1007/s10643-017-0869-3
- Scott, J. G., Mihalopoulos, C., Erskine, H. E., Roberts, J., & Rahman, A. (2016). Childhood mental and developmental disorders. In V. Patel, D. Chisholm, T. Dua, R. Laxminarayan, & M. E. Medina-Mora (Eds), *Mental, neurological, and substance use disorders: Disease control priorities.* The International Bank for Reconstruction and Development. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK361938/
- Shaw, S. R., Gomes, P., Polotskaia, A., & Jankowska, A. M. (2015). The relationship between student health and academic performance: Implications for school psychologists. *School Psychology International*, *36*(2), 115-134. Retrieved from https://journals.sagepub.com/doi/10.1177/0143034314565425
- Shefferly, A., Scharf, R. J., & DeBoer, M. D. (2016). Longitudinal evaluation of 100% fruit juice consumption on BMI status in 2–5-year-old children. *Pediatric obesity*, 11(3), 221-227. Retrieved from https://onlinelibrary.wiley.com/doi/10.1111/ijpo.12048

- Snyder, D. (2020). *The importance of having a relationship with your child's pediatrician*. Nationwide Children's Hospital. Retrieved from https://www.nationwidechildrens.org/family-resources-education/700childrens/2018/07/importance-of-having-a-relationship-with-your-childs-pediatrician
- Stanford Medicine Children's Health. (2022). *A Child's First Dental Visit Fact Sheet*. Retrieved from <a href="https://www.stanfordchildrens.org/en/topic/default?id=a-childs-first-dental-visit-fact-sheet-1-1509#:~:text=The%20first%20dental%20visit%20is,to%20check%20growth%20and%20development
- State of Nevada Department of Education. (2022). 2022-2023 School Year Number of Students Receiving Educational Services as of 10/03/2022. [Excel] Retrieved from https://doe.nv.gov/DataCenter/Enrollment Data/
- Story, C. R., Crethar, H. C., & Hall, P. T. (2014). Privilege, oppression and the Affordable Care Act: Cultural implications for health educators. *American Journal of Health Studies*, 29(4), 302-308. Retrieved from doi.org/10.47779/ajhs.2014.228
- Suhrcke, M. & de Paz Nieves, C. (2011). The impact of health and health behaviors on educational outcomes in high-income countries a review of the evidence. Copenhagen, WHO Regional Office for Europe. Retrieved from https://www.drugsandalcohol.ie/16564/1/WHO Europe Impact of health and health behaviours.pdf
- U.S. Census Bureau. (2021). Quickfacts: Nevada. Retrieved from https://www.census.gov/quickfacts/fact/table/NV/
- U.S. Department of Education. (2019). Chronic *Absenteeism in Nation's Schools*. Retrieved from: https://www2.ed.gov/datastory/chronicabsenteeism.html?src=pr
- U.S. Department of Health and Human Services. (2021a). *Increase the proportion of infants who are breastfed at 1 year MICH-16*. Healthy People 2030. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-1-year-mich-16
- U.S. Department of Health and Human Services. (2021b). *Increase the proportion of infants who are breastfed exclusively through age 6 months MICH-15*. Healthy People 2030. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-exclusively-through-age-6-months-mich-15
- U.S. Department of Health and Human Services' Office on Women's Health. (2011). Your guide to breastfeeding. Retrieved from https://owh-wh-d9-prod.s3.amazonaws.com/s3fs-public/your-guide-to-breastfeeding.pdf
- Vitrikas, K. R., Savard, D., & Bucaj, M. (2017). Developmental delay: When and how to screen. American family physician, 96(1), 36-43. Retrieved from https://www.aafp.org/pubs/afp/issues/2017/0701/p36.html
- Whitney, D. G., & Peterson, M. D. (2019). US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA Pediatrics*, 173(4), 389. Retrieved from https://jamanetwork.com/journals/jamapediatrics/fullarticle/2724377
- Witt, W. P., Fullerton, C. A., Chow, C., Gokhale, M., Naeger, S., Walsh, C., & Karnell, L. (2017). Effect of having a usual source of care on health care outcomes among children with serious emotional disturbance.

 **Academic Pediatrics*, 17(1), 45-52. Retrieved from https://www.academicpedsjnl.net/article/S1876-2859(16)30320-5/fulltext
- Wojcicki, J. M., & Heyman, M. B. (2012). Reducing childhood obesity by eliminating 100% fruit juice. *American Journal of Public Health*, 102(9), 1630-1633. Retrieved from https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2012.300719

- Yun, L., & Evangelou, N. (2017). Social benefits of home ownership and stable housing. The Journal of the Center for Real Estate Studies, 5(1), 5–19. Retrieved from https://www.gmar.com/data/resources_files/Social%20Benefits%20of%20Homeownership%20%20Stable%20Housing.pdf
- Zhou, J. Y., Elyasi, M., & Amin, M. (2017). Associations among dental insurance, dental visits, and unmet needs of US children. *The Journal of the American Dental Association*, 148(2), 92-99. Retrieved from https://jada.ada.org/article/S0002-8177(16)30904-7/fulltext