Health Status of Children Entering Kindergarten in Nevada

Results of the 2020-2021
(Year 13)
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

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Nevada Institute For Children's Research & Policy
NICRP
University of Nevada, Las Vegas
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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

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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 all 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 2020, NICRP distributed questionnaires to all public elementary schools in the state. The survey had an overall response rate of 7.8 percent, with a total of 2,372 surveys received from parents in all 17 school districts in Nevada. The data herein are weighted (n = 29,800) 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. Please note that for each table, red arrows indicate negative change, green indicates positive change, and yellow indicates no change.

Health Status: Compared to last year, the percentage of respondents reporting being underweight, and drinking both non-diet and diet soda once a day or more slightly increased. However, the percentage of respondents that reported exclusive breastfeeding increased at all time points, being overweight or obese had a slight decrease, as well as the percentage of respondents that never drink non-diet soda.

	2019-2020	*2020-2021*	*% Change*	*
Weight Status				
Underweight	17.3%	19.5%	+12.7%	▲
Healthy	50.3%	48.6%	-3.4%	▼
Overweight/Obese	32.4%	31.9%	-1.5%	▼
Physical Activity				
7 days per week of 60-minutes of physical activity	39.0%	37.4%	-4.1%	▼
Consumption of Non-Diet Soda				
Never drink non-diet soda	69.2%	71.6%	+3.5%	▲
Drink non-diet soda once a day or more	7.0%	7.5%	+7.1%	▲
Consumption of Diet Soda				
Never drink diet soda	88.8%	88.3%	-0.6%	▼
Drink diet soda once a day or more	2.6%	2.9%	+11.5%	▲
Infant Feeding Behaviors				
Breastfed Only – One Month	51.4%	53.1%	+3.3%	▲
Breastfed Only – Three Months	39.3%	42.6%	+8.4%	▲
Breastfed Only – Six Months	25.8%	28.8%	+11.6%	▲
Breastfed Only – Twelve Months	17.6%	17.9%	+1.7%	▲

Note. *Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±0.5%).

Household Income: Compared to last year, fewer households make under $54,999 a year, while the percentage of households that make $55,000 or more per year has increased.

	2019-2020	*2020-2021*	*% Change*	*
Household Income				
Less than $25,000 per year	19.9%	18.3%	-8.0%	▼
$25,000 - $54,999 per year	31.9%	26.8%	-16.0%	▼
$55,000 or more per year	48.2%	54.9%	+13.9%	▲

Note. *Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±0.5%).

Insurance Status: Compared to the previous year, the percentage of uninsured children has decreased as well as those covered by Medicaid and Nevada Check-up, and there was an increase in those covered by private insurance.

	2019-2020	*2020-2021*	*% Change*	*
Insurance Status				
Uninsured	6.5%	5.4%	-16.9%	▼
Private Insurance	50.9%	54.7%	+7.5%	▲
Medicaid	29.4%	27.5%	-6.5%	▼
Nevada Check-Up	6.3%	5.4%	-14.3%	▼

Note. *Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±0.5%).

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

	2019-2020	*2020-2021*	*% Change*	*
Routine Care				
Had a routine medical checkup in last 12 months	90.6%	86.8%	-4.2%	▼
Have a primary care provider	89.3%	92.0%	+3.0%	▲
Have been to a dentist in past 12 months	79.3%	76.1%	-4.0%	▼

Note. *Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±0.5%).

Access to Healthcare: Compared to last year, slightly more respondents reported barriers to accessing insurance, quality medical providers, money/financial resources, and mental health services.

	2019-2020	*2020-2021*	*% Change*	*
Barriers to Accessing Healthcare**				
None	80.4%	80.0%	-0.5%	◆
Lack of Transportation	3.2%	3.2%	0.0%	◆
Lack of Insurance	6.2%	6.9%	+11.3%	▲
Lack of Quality Medical Providers	5.9%	6.5%	+10.2%	▲
Lack of Money/Financial Resources	9.4%	10.4%	+10.6%	▲
Have tried to access mental health services	7.1%	8.1%	+14.1%	▲
Had trouble obtaining mental health services***	40.0%	44.1%	+10.3%	▲

Note. *Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±0.5%).
**Since respondents could select more than one barrier, totals may exceed 100%.
***Only refers to respondents who answered that they had tried to access mental health services.

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.

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 by 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 community, neighborhood, and school characteristics, as well as access to services, health status, and where one falls on the socio-economic ladder (Smith, 2008; 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? Children with poor health status, especially those with common chronic health conditions, such as obesity or asthma, have a higher number of school absences, resulting in more academic deficiencies than those students with good health status (Basch, 2010). School attendance is positively correlated with higher standardized test scores and graduation rates, while low school attendance is associated with lower standardized test scores and higher dropout rates (Gershenson, Jacknowitz, & Brannegan, 2017). It is estimated that nationally, more than 7 million students are chronically absent (U.S. Department of Education, 2019). Studies examining rates of absenteeism have found rates highest among those living in poverty (Jacob & Lovett, 2017), and those living in rural areas (Balfanz & Byrnes, 2012). In addition, the number one reason students could not attend school was due to illness, which disproportionately impacting children in low-income communities with limited access to healthcare (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 and long-term educational attainment found that children who can access Medicaid while they are young have higher rates of academic success. The benefits of Medicaid on academic achievement are highest among those who complete high school, those who go to college, and those who obtain a 4-year degree (Cohodes, Grossman, Kleiner, & Lovenheim, 2014).

There is no question that the first years of life are predictive of future success. The Brookings Institute's Social Genome Model measures children's life chances from early childhood, middle childhood, adolescence, transition into young adulthood, and adulthood. Through their research, they found that success in each stage is highly dependent upon success during earlier stages. 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, 2014, p. 3). Additional studies support that the years from birth to school age are key to the development of the brain and establishing language and cognitive skills that are needed to learn, cope with stresses, and develop interactions with others (Shonkoff & Phillips, 2000; Shonkoff & Richmond, 2009). These studies support early and ongoing assessment and intervention efforts to improve long-term outcomes for Nevada's children.

INTRODUCTION

COVID-19 has had a profound impact on the world and our nation, changing routines and plans, causing stress and uncertainty, and affecting the lives of children and families. Due to the changes in their environment and the increased isolation children face, children are left with social, emotional, and developmental impacts, alongside parents who face potential unemployment, health issues, and burdens such as working at home or lack of childcare (Rabinowicz, Leshem, & and Pessach, 2020). Children are more prone to anxiety, depression, and trauma-related mental health diagnoses, as well as behavioral reactions including changes in appetite, irritability, sleep problems, phobias, and clinginess to parents that can arise in high-stress situations such as a pandemic or natural disaster (Children's Hospital Association, 2020). Children are looking to parents, caregivers, and teachers to provide them with safe and supportive environments to better cope with the pandemic. It is suggested that due to this significant life event that impacted the entire world, this year's data maybe not be comparable to other years and the true impacts from the pandemic are more likely to be seen in future survey results.

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 (NDPBH), 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 provide baseline assessment data on the health status of kindergarteners for partners to make informed programmatic, system-level, and policy decisions that may improve the long-term outcomes of our children.

METHODOLOGY

The Kindergarten Health Survey (KHS) used in this study was created in 2008 in partnership with the Clark County School District (CCSD) and the Southern Nevada Health District (SNHD) and has been administered on an annual basis since. 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 occurred 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 36 questions (12 demographic questions and 24 questions related to health and early childhood environments) and continues to be printed double-sided to provide the survey in both English and Spanish. Due to the pandemic, an online version of the survey was created in Qualtrics.

At the beginning of Fall 2020, questionnaires were distributed to kindergarten teachers in all public elementary schools in the state. Due to the pandemic, some schools requested to distribute the surveys electronically. If the school requested online distribution, the link to the survey was sent to the school and the school directly provided the link to the parents. Parents who received the paper survey and chose to participate either turned the survey into the school office, their child's teacher, or mailed it directly to NICRP. Parents who received the link to the survey and chose to participate submitted the survey electronically and data were accessed through Qualtrics directly by NICRP.

NICRP staff followed-up with each school to ensure receipt of materials or to answer questions regarding the new online 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 mid-October and November 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 and if the school 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 PASW Statistics software version 25.0 (SPSS IBM, New York, U.S.A.). 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 kindergarten student population for the survey year of this report. Therefore, the responses received from the 2,372 respondents represent a total of 29,257 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, several of the responses were left blank on the surveys received. All the surveys received were included in the analyses however, it is important to note when reading percentages presented that 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 includes children who attend public kindergarten and some Nevada State Charter schools that agreed to participate. Therefore, it does not represent all children from that age group statewide. Based on the number of 5-year-olds who were projected to reside in the state of Nevada in 2020 (approximately 41,311 children) (Nevada State Demographer, 2019) and the number of children who were enrolled in public kindergarten (31,995) (Nevada Department of Education, 2020), it appears that 22.55 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 2020-2021 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 2020-2021 school year. Based on these estimates, 30,480 surveys were distributed either via a link (Clark, Churchill, and Elko) or physically sent to participating schools. At the end of the data collection period (April 2021), only 2,372 surveys were returned to NICRP for a **response rate of 7.8 percent.** While enough surveys were collected to represent Clark, Washoe, and the Rural Counties combined, as well as the state, this response rate is significantly lower than previous years due to the pandemic. This should be taken into consideration when reviewing all results. Response rates for each school district (Table 1.1) ranged from 0 percent in Elko County to 40.7 percent in Humboldt County. The three lowest response rates are from the schools that distributed the survey online.

Table 1.1 Survey Response Rate by School District

School District	# Surveys Distributed	# Surveys Returned	Response Rate
Carson City	488	64	13.1%
Churchill County- Online	220	15	6.8%
Clark County - Online	21,600	989	4.6%
Douglas County	365	108	29.6%
Elko County - Online	675	0	0.0%
Esmeralda County	15	6	40.0%
Eureka County	27	3	11.1%
Humboldt County	300	122	40.7%
Lander County	100	24	24.0%
Lincoln County	55	11	20.0%
Lyon County	700	256	36.6%
Mineral County	55	16	29.1%
Nye County	390	120	30.8%
Pershing County	60	12	20.0%
Storey County	30	9	30.0%
Washoe County	5,300	601	11.3%
White Pine County	100	16	16.0%
All Districts	30,480	2,372	7.8%

In addition, NICRP calculated a response rate based on the number of surveys returned and the number of kindergarteners enrolled within each school district by obtaining the unaudited

enrollment numbers for each school district from the Nevada Department of Education (NDE) (Table 1.2) (Nevada Department of Education, 2020). This information is 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.

The response rates observed comparing the NDE unaudited enrollment data and the survey distribution response rate ranged from 0 percent (Clark and Elko Counties) to 9.9 percent (Humboldt County). However, for the majority of districts, the response rate for the surveys distributed was similar to the NDE unaudited enrollment data. Therefore, the overall response rate for the unaudited enrollment response rate and the survey distribution response rate only varied by 0.33 percent. Some deviation between estimated and actual enrollment numbers is expected, and based on the similarities in response rates for the state as a whole, the response rate of the survey distribution is valid.

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	523	488	12.2%	13.1%
Churchill County	218	220	6.9%	6.8%
Clark County	21600	21600	4.6%	4.6%
Douglas County	323	365	33.4%	29.6%
Elko County	658	675	0.0%	0.0%
Esmeralda County	14	15	42.9%	40.0%
Eureka County	24	27	12.5%	11.1%
Humboldt County	241	300	50.6%	40.7%
Lander County	81	100	29.6%	24.0%
Lincoln County	51	55	21.6%	20.0%
Lyon County	610	700	42.0%	36.6%
Mineral County	50	55	32.0%	29.1%
Nye County	336	390	35.7%	30.8%
Pershing County	55	60	21.8%	20.0%
Storey County	29	30	31.0%	30.0%
Washoe County	4379	5,300	13.7%	11.3%
White Pine County	65	100	24.6%	16.0%
All Districts	29,257	30,480	8.1%	7.8%

SURVEY PARTICIPATION BY SCHOOL DISTRICT

Figure 1.1 illustrates the participation of Washoe, Clark, and all Rural Counties combined. A total of 2,372 surveys were utilized for analysis with parents completing 41.7 percent of those surveys in Clark County, 25.3 percent in Washoe County, and 33 percent in the Rural Counties. This year, Clark County had a lesser response rate compared to last year, from 56.4 percent to 41.7 percent. Washoe County's response rate increased from 22.6 percent last year to 25.3 percent this year, while in Rural Counties the response rate increased from 20.9 to 33 percent.

Figure 1.1 Survey Participation by School District, Unweighted

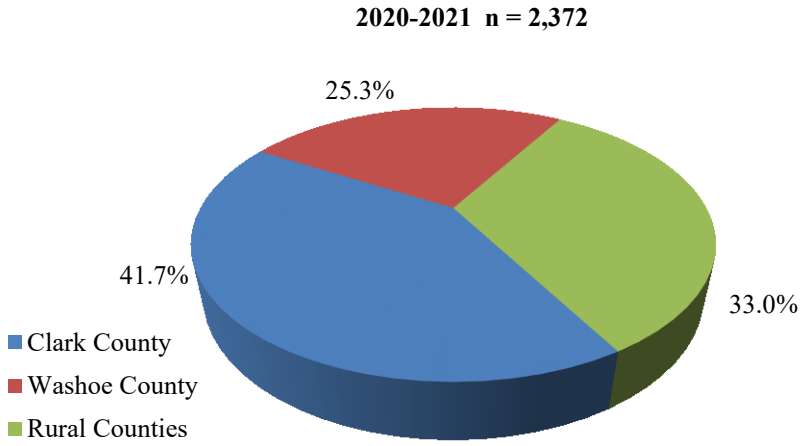
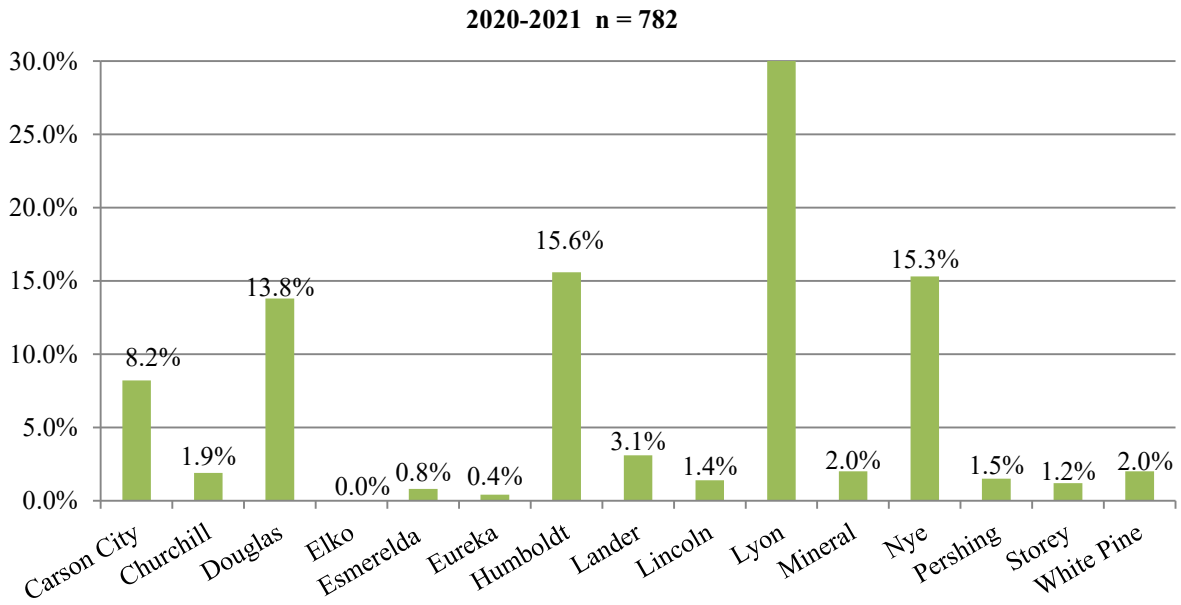


Figure 1.2 Illustrates county-specific participation for *only* Rural Counties, representing 33 percent of the total respondents.

Figure 1.2 Survey Participation among All Rural Counties, Unweighted



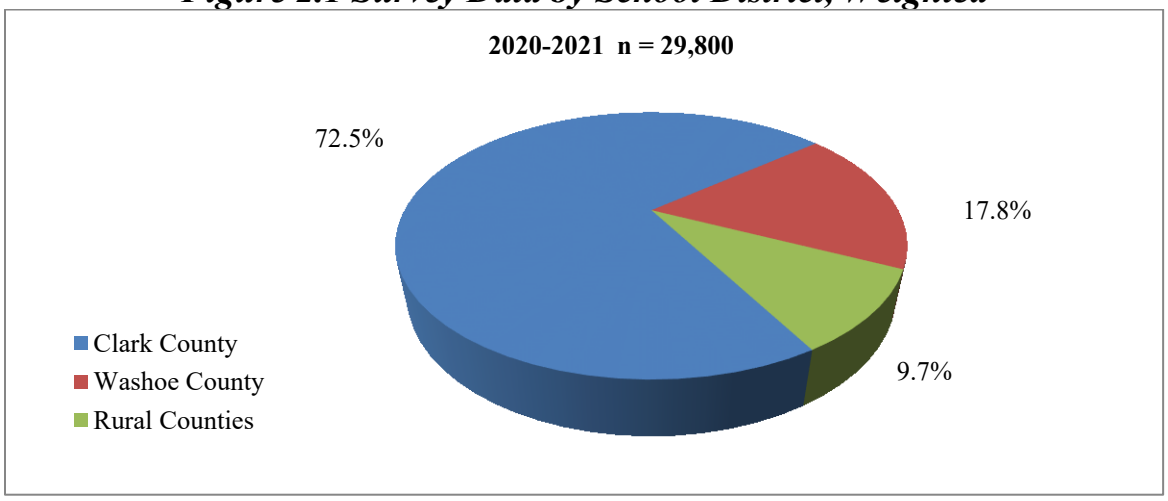
2 DEMOGRAPHICS

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 2,372 respondents who returned the surveys, 93.3 percent completed the English version, and 6.7 percent completed the Spanish version. In addition, 60.8 percent of surveys received were completed using paper surveys while 39.2 percent were completed online.

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 2,372 respondents represent a total of 29,800 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.

Figure 2.1 Survey Data by School District, Weighted



Parents 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 higher percentage of males (52.3%) than females (47.4%) and included parents who selected other (0.2%) for gender.

FAMILY DEMOGRAPHICS

The average age of the child's mother was 34.99 (*SD* = 6.46), and the average age of the child's father was 37.36 (*SD* = 8.10). The average number of adults living in a household was 2.14 (*SD* = 1.09) and ranged from zero to 27 adults. The number of children living in a household

averaged 2.50 (*SD* = 1.45) and ranged from zero to 36 children. 24.1 percent of parents indicated that they were a single parent or guardian.

ANNUAL HOUSEHOLD INCOME AND HOUSING TENURE

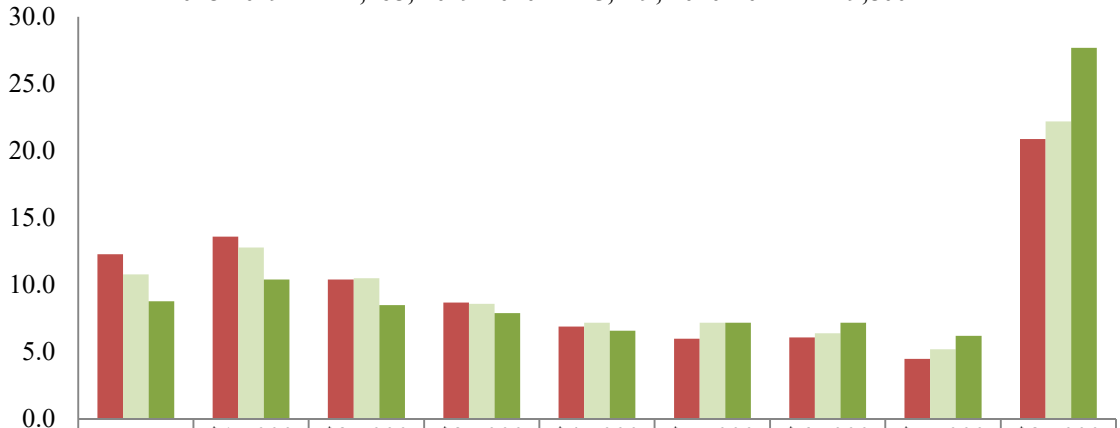
According to an estimation by the U.S. Census Bureau, the 2019 median household income in Nevada was $60,365. This median income represents the middle value of a distribution and is the best measure of central tendency to reduce the impact of outliers (very high or very low incomes) in the distribution. Compared to the median income listed for Nevada, 42.2 percent of all respondents reported an annual income below $55,000 (See Figure 2.2).

Compared to previous survey years:

- The number of families with annual income levels below $25,000 has decreased by 4.4 percentage points since last year. Overall, there was also a decrease in families earning $45,000 or less per year from the previous year (See Appendix A, Table 10.2).
- Over the last year, the number of families with an annual income between $45,000 and $54,999 slightly decreased. However, the number of families in all of the other annual income categories greater than $64,999 slightly increased.

Figure 2.2 Annual Household Income by School Year

2018-2019 n = 24,268; 2019-2020 n= 25,429; 2020-2021 n = 29,800



	$0 - $14,999	$15,000 - $24,999	$25,000 - $34,999	$35,000 - $44,999	$45,000 - $54,999	$55,000 - $64,999	$65,000 - $74,999	$75,000 - $84,999	$85,000 - $94,999
2018-2019	12.3	13.6	10.4	8.7	6.9	6.0	6.1	4.5	20.9
2019-2020	10.8	12.8	10.5	8.6	7.2	7.2	6.4	5.2	22.2
2020-2021	8.8	10.4	8.5	7.9	6.6	7.2	7.2	6.2	27.7

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. For children, housing instability has negative consequences on physical health, mental health, cognition, and learning, which all impact academic achievement (Marcal & Fowler, 2015). Households behind on rent had increased odds of fair and/or poor caregiver health, maternal depressive 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, Kull, Leventhal, & Lynch, 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 46.2 percent of children live in rental housing and 53.8 percent live in owner-occupied housing. Upon further examination, income and racial disparities exist for housing tenure. With regards to income, approximately 60.8 percent of the 46.2 percent of individuals who rent earn less than $45,000 a year. With regards to race, **72.6 percent of individuals who identified as African American/Black live in rental housing** compared to 33.3 percent of individuals who identified as Caucasian and 36.8 percent of those who identified as Asian/Pacific Islander. A high percentage of those who identified as Hispanic (59.6%) also rent, followed by Native American/Alaskan Native (56.1%), Mixed Race (52.6%), and Other (49.8%).

COVID-19 has had a large impact on housing, especially for those with low-incomes (Opportunity Finance Network [OFC], 2020). Many tenants are facing job loss and income loss that affects their ability to pay for rent, buy food, or access health care (OHC, 2020). 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, 2020). One study found that eviction and foreclosure rates have doubled, with Black and Hispanic households having reported higher evictions than White households (Chun & Grinstein-Weiss, 2020). Also, the rate of rent/mortgage delinquency and delayed bill payments is higher for Black and Hispanic households (Chun & Grinstein-Weiss, 2020).

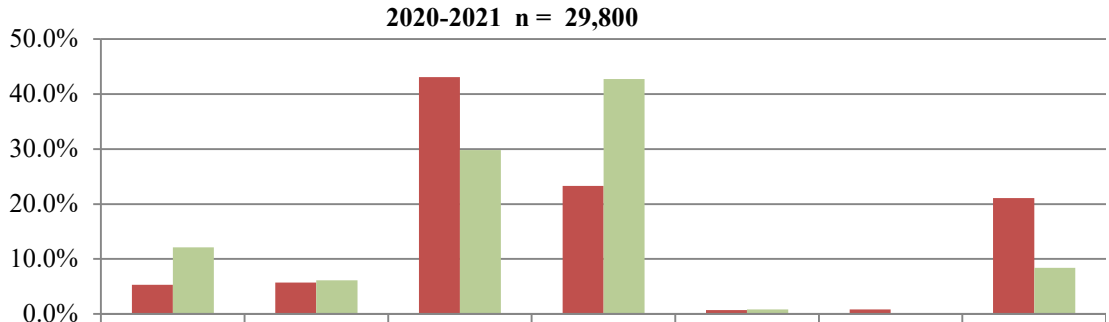
RACE/ETHNICITY

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, the reported race/ethnicity of the kindergarteners in this survey had larger discrepancies than past years. KHS survey respondents included less Hispanic participants (19.4 percentage points), more Caucasian participants (13.3 percentage points), more multiple race participants (12.7 percentage points), and less African American/Black participants (6.8 percentage points) (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.

When comparing results across counties for the 2020-2021 school year (See Appendix A, Table 10.1), there are larger percentages of African American/Black, Asian/Pacific Islander, and Multiple Race kindergarteners in Clark County as compared to Washoe County and the Rural Counties. There are also larger percentages of African American/Black and Asian/Pacific Islander kindergarteners in Washoe County compared to the Rural Counties. In Washoe County,

there is a larger percentage of Native American/Alaskan Native kindergarteners than in Clark County and there is an even larger percentage of Native American/Alaskan Native kindergarteners in the Rural Counties.

Figure 2.3 Child's Race/Ethnicity



	African American /Black	Asian/ Pacific Islander	Caucasian	Hispanic	Native American / Alaska Native	Other Race	Multiple Races
2020-2021	5.3%	5.7%	43.1%	23.3%	0.7%	0.8%	21.1%
Nevada DOE*	12.1%	6.1%	29.8%	42.7%	0.8%		8.4%

*Note. *Nevada Department of Education (2020). 2020-2021 Kindergarten School Year Student Counts. Retrieved from http://www.doe.nv.gov/DataCenter/Enrollment/.*

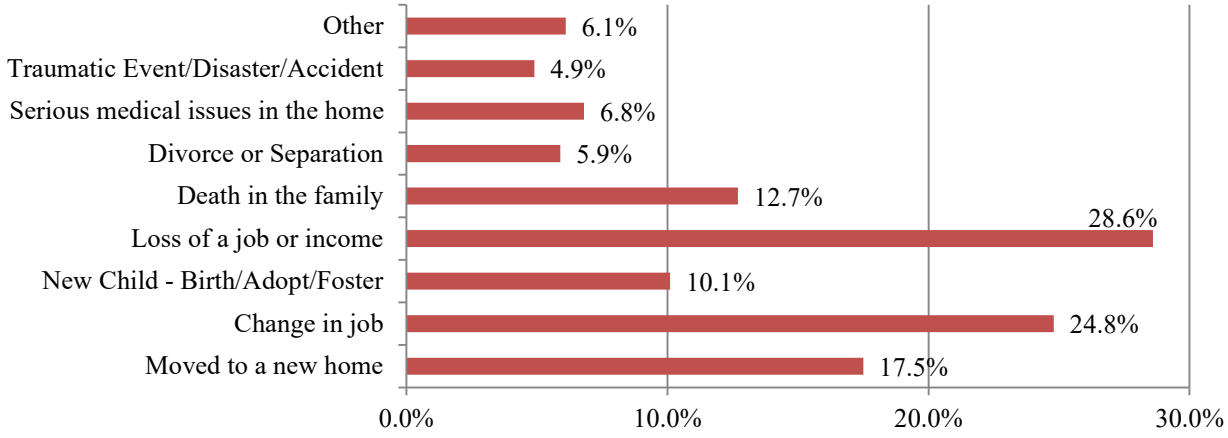
FAMILY ENVIRONMENT

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). The combination of stressful events with emotional support to help a young child cope is referred to as positive stress (Center on the Developing Child, 2016). Conversely, the impact of acute and chronic stressors may disrupt a child's physiological response and familial relationships. Children in adverse environments during their formative years may experience long-term consequences (Cohen, 2017; Masarik & Conger, 2017; Sciaraffa, Zeanah, & Zeanah, 2018). Adults who had 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 (64.3%) in the past year. The most common life event was the loss of a job or income (28.6%), followed by a change in job (24.8%) (See Figure 2.4).

Figure 2.4 Life Events

2020-2021 n = 29,800



Note. Respondents can 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 COVID-19, illness of a family member not in the home, marriages or engagements, and custody issues.

HOUSEHOLD SMOKING

In the US, more than 16 million people live with health conditions caused by smoking (Centers for Disease Control and Prevention [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). However, the impact is not only suffered by those who smoke, but also by those who are exposed to secondhand smoke. In the US, 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) (U.S. Department of Health and Human Services [DHHS], 2014; DHHS 2014). In young children, it increases the risk of lung problems, ear infections, and severe asthma. Children may be exposed to secondhand smoke in a variety of places such as cars and public spaces, but the most common place for exposure is often the home (DHHS, 2006; CDC, 2010). The combination of secondhand smoke and the 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, Winickoff, & Rigotti, 2011). Another study also 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, Jandarov, & Mahabee-Gittens, 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

(2021) 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% of households in the U.S. with at least one daily smoker allowed smoking indoors during the stay-at-home orders, with 57.4% of households including children (Okereke et al., 2021).

This 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. Results from Table 2.1 indicate that 13.1 percent of children live in a home with a household smoker, while just over one percent allow smoking in the home.

Table 2.1 Percent of Children in Households that Smoke

SMOKER IN HOUSEHOLD ***n* = 29,266**	SMOKING ALLOWED IN THE HOME ***n* = 29,140**
13.1%	1.2%

PRESCHOOL SETTING

Respondents were asked to indicate the type of preschool setting their kindergartener attended in the past twelve months, if any (See Figure 2.5). At the time of this survey, the pandemic had been ongoing for approximately six months, significantly impacting early childhood education programs. Many of Nevada's childcare providers struggled to stay open, facing additional expenses, as well as state mandates that limit the number of children they were allowed to serve. According to a survey by the National Association for the Education of Young Children (NAEYC) in May 2020, 70% of Nevada childcare providers who responded to the survey operated with modified rules, 13% closed to everyone except children related to essential staff, and 41% laid off or furloughed employees or themselves (NAEYC, 2020). Therefore, caution should be used when comparing these results to other survey years or forming decisions about the future use of early childhood education programs.

Compared to 2019-2020 data:

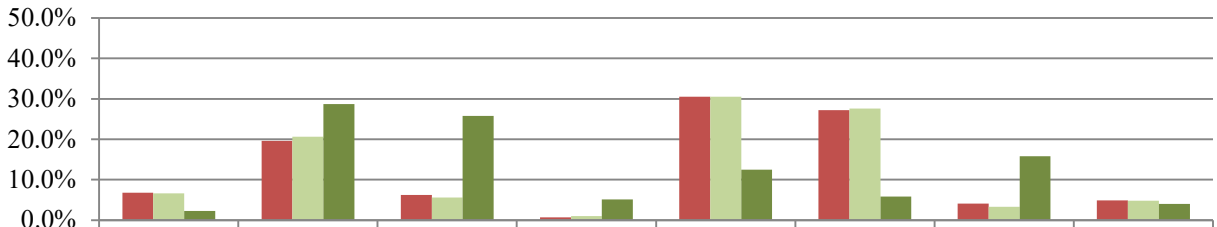
- The percentage of children who did not attend preschool dramatically decreased from 27.6% in 2019 to 5.8% in 2020.
- Participation in Head Start, school district preschool, drastically decreased, yet participation in home-based care increased as well as attendance at multiple sites.
- These changes are likely because of the impact of the COVID-19 pandemic on early childhood education as well as the low response rates for this survey that are skewing the data.

When comparing the 2020-2021 data across counties (See Appendix A, Table 10.1):

- A higher percentage of children attended Head Start in Washoe County (7.0%) and Rural Counties (5.2%), than compared to Clark County (0.6%).
- A higher percentage of children attended school district run preschools in Rural Counties (41.3%), compared to Washoe County (23.0%) and Clark County (5.3%).
- An extremely low percentage of children in Clark County (0.6%) stayed at home, compared to Washoe County (19.6%) and Rural Counties (15.1%).

Figure 2.5 Child's Type of Preschool Setting during Last Twelve Months

2018-2019 n = 31,193; 2019-2020 n = 30,919; 2020-2021 n = 29,800



	Head Start	Other Facility/ Care	Home-Based Care	University Campus Pre-School	School District Pre-School	None/ Stayed Home	Multiple Sites	Friends/ Family/ Neighbor Care
2018-2019	6.8%	19.6%	6.2%	0.7%	30.5%	27.2%	4.1%	4.9%
2019-2020	6.6%	20.6%	5.6%	1.0%	30.5%	27.6%	3.3%	4.8%
2020-2021	2.3%	28.7%	25.8%	5.1%	12.5%	5.8%	15.8%	4.0%

Average Hours of Preschool Attendance

Since the 1950s, there has been a drastic increase in the percentage of children who are spending time in non-parental childcare settings (McGroder, 1988). Sixty percent of children under five spend time each week in some form of non-parental childcare setting (Iruka & Carver, 2006; Redford, Desrochers, & Hoyer, 2017). Thus, it is important to understand how preschool environments affect our children specifically. 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 from Table 2.2 indicate that less than 20% of parents/guardians have their child at home (18.1%), 54.6 percent have their child in someone else's care for 20 hours or fewer per week, 22.4 percent have their child in someone else's care 21-40 hours per week, but only 4.9 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 higher percentage of children were in care 20 hours a week or fewer in Clark County (77.6%), compared to Rural (65.9%) and Washoe (58.1%) Counties.
- A higher percentage of children were in care more than 20 hours a week in Washoe County (41.9%), compared to Clark County (22.3%) and Rural Counties (34.1%).

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
18.1%	3.5%	24.4%	14.1%	12.6%	9.3%	13.1%	4.9%

Note. n = 26,593

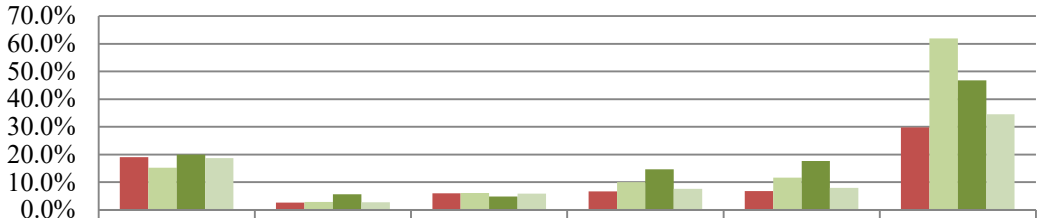
Barriers to Preschool Attendance

KHS captures information about preschool barriers to determine effective ways to increase access for those who would like to send their child to preschool. When parents indicated that

their child did not attend preschool or did not attend the school they preferred, parents reported cost as the most common reason (See Figure 2.6). In addition to the responses provided, parents could write in other reasons why their child did not attend preschool or go to their preferred school. Among those who reported an "other" barrier, the most common barriers reported by parents included COVID-19, not meeting the income requirement, lack of transportation, not meeting the age requirement, and their child not being "potty trained."

Figure 2.6 Reasons Why a Child Did Not Attend Preschool

2020-2021 n = 21,748



	Too expensive	Location too far	Hours not convenient	No Open Spots	Other	No Challenges / Wanted them home
Clark	19.1%	2.6%	6.0%	6.7%	6.8%	29.8%
Washoe	15.3%	2.9%	6.1%	10.0%	11.7%	61.9%
Rural	20.0%	5.6%	4.9%	14.7%	17.7%	46.8%
State	18.7%	2.8%	5.9%	7.6%	8.0%	34.5%

Note. Respondents can select multiple categories

Parents 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 (57.8%) indicated that they preferred full-time preschool and 50.9 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. Variations in socioeconomic status are correlated with differences in language outcomes. Children's exposure to oral language is significantly lower in families with incomes below the federal poverty level. This lack of exposure is often due to less frequent shared book reading, inaccessibility of printed material (Duursma, Augustyn, & Zuckerman, 2008), parents using shorter sentences, fewer different words, and sometimes having lower reading comprehension (Neuman, Kaefer, & Pinkham, 2018). Lack of exposure may result in delayed language and literacy development, and these delays are often notable once children enter kindergarten (Fernald, Marchman, & Weisleder, 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 failures. As a result of these important findings, the KHS captures information about how often children were read to in the home.

In 2020-2021, 35.1 percent of children were read to every day and only 2.6 percent of children were not read to at all in the past week (See Appendix A, Table 10.1). When comparing KHS

survey data with national and statewide data on reading, more children in our sample were read to four to six days of the week than the national and state averages, and 35.2% of the children in our sample were read to daily, which is consistent with the national average.

Table 2.3 Comparison of Reading Frequency Per Week

	0 Days	1-3 Days	4-6 Days	Every Day
Nationwide	7.8%	37. 3%	19.6%	35.3%
Nevada	6.7%	42.4%	20.2%	30.7%
KHS Data	2.6%	27.7%	34.5%	35.2%

Note. n = 14,907. Child and Adolescent Health Measurement Initiative. 2018-2019 National Survey on Children`s Health: https://www.childhealthdata.org/browse/survey/results?q=7906&r=1

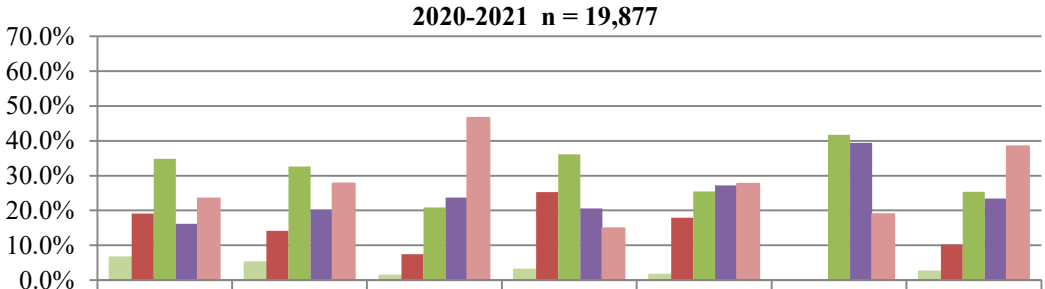
Figures 2.7 and 2.8 evaluate the frequency of reading by demographic characteristics such as race/ethnicity and household income. In this data, we found that:

- Children in the Caucasian category are read to every day at a higher percentage (46.6%) than all other race/ethnicities.
- Hispanic children trail behind the most in terms of daily reading.
- The frequency of reading on a daily basis shows a slight positive association with income.

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

- A higher percentage of children were read to daily in the past week in Clark County (36.6%), as compared to Rural Counties (30.1%) and Washoe County (32.9%).
- A higher percentage of children were not read to in the past week in Washoe County (4.5%) as compared to Clark County (2.1) and Rural Counties (2.0%).

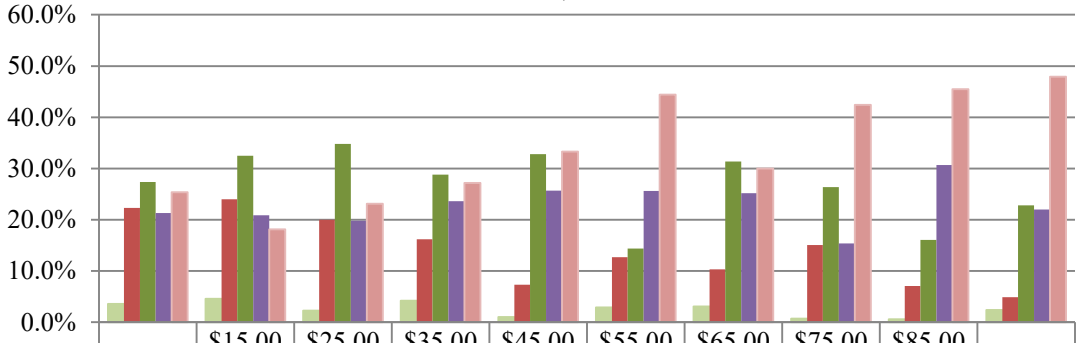
Figure 2.7 Reading Frequency by Child's Race/Ethnicity



	African American / Black	Asian/ Pacific Islander	Caucasian	Hispanic	Native American / Alaska Native	Other Race	Multiple Races
None	6.5%	5.2%	1.3%	3.1%	1.6%	0.0%	2.5%
1-2 days	19.1%	14.2%	7.5%	25.3%	17.9%	0.0%	10.2%
3-4 days	34.8%	32.6%	20.9%	36.1%	25.5%	41.7%	25.4%
5-6 days	16.2%	20.2%	23.7%	20.6%	27.2%	39.4%	23.4%
7 days	23.4%	27.8%	46.6%	14.9%	27.7%	18.9%	38.4%

Figure 2.8 Reading Frequency by Household Income

2020-2021 n = 17,530



	$0 - $14,999	$15,000- $24,000	$25,000- $34,999	$35,000- $44,999	$45,000- $54,000	$55,000- $64,999	$65,000- $74,999	$75,000- $84,999	$85,000- $94,999	$95,000 +
None	3.6%	4.6%	2.3%	4.2%	1.0%	2.9%	3.1%	0.7%	0.6%	2.4%
1-2 days	22.3%	24.0%	20.0%	16.2%	7.3%	12.7%	10.3%	15.1%	7.1%	4.9%
3-4 days	27.4%	32.5%	34.8%	28.8%	32.8%	14.4%	31.4%	26.4%	16.1%	22.8%
5-6 days	21.3%	20.9%	19.8%	23.6%	25.7%	25.6%	25.2%	15.4%	30.7%	22.0%
7 days	25.4%	18.1%	23.1%	27.2%	33.3%	44.4%	30.0%	42.4%	45.5%	47.9%

3 INSURANCE STATUS

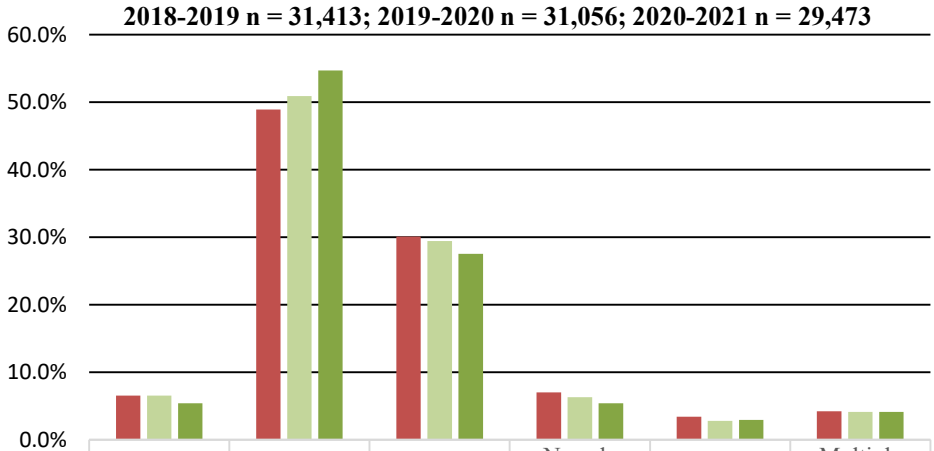
Nevada has consistently placed near the bottom of national rankings in the percent of children covered by health insurance. According to the U.S. Census Bureau American Community Survey (2018), approximately 5.2 percent of children under the age of 19 in the United States are uninsured compared to 7.9 percent of children under the age of 19 in Nevada.

A correlation exists between children's health insurance status and access to healthcare 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 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: healthcare access and affordability, prevention and treatment, avoidable hospital use and cost, equity, and healthy lives (Radley, McCarthy, & Hayes, 2019). Changes in health insurance status could be affected by COVID-19, as more than seven million people lost their employer-sponsored health insurance (ESI) 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



	Uninsured	Private	Medicaid	Nevada Check Up	Other	Multiple Types
2018-2019	6.5%	48.9%	30.1%	7.0%	3.4%	4.2%
2019-2020	6.5%	50.9%	29.4%	6.3%	2.8%	4.1%
2020-2021	5.4%	54.7%	27.5%	5.4%	2.9%	4.1%

Approximately 94.6 percent of respondents reported that their child had some type of health insurance and 5.4 percent of respondents stated that their child had no coverage.

Of the health insurance options:

- Just over half (54.7%) of the respondents indicated that their kindergartener had private health insurance.
- There were 32.9 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).

A small percentage of individuals indicated that their child either had "other" insurance (2.9%) or multiple types of insurance (4.1%). When possible, "other" responses were re-coded into existing categories. For those that remained in the other category, some included Indian Health Service coverage, medical sharing or discount plans, or insurance providers listed as providing both private and public insurance, so it was not possible to determine their appropriate categorization.

Over the past year, the uninsured rate in kindergarten children has remained the same and the percentage of children on Medicaid continues to decline. 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, Crethar, & Hall, 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, 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. Parents of kindergarteners reported:

- 57.1 percent of the total respondents stated that they or someone else had applied for insurance through the exchange for their child. This is a very high percentage compared to previous years and may be a result of COVID-19 or the smaller sample size obtained.
    - 83.1 percent of respondents stated that their child was approved (See Appendix A, Table 10.1).

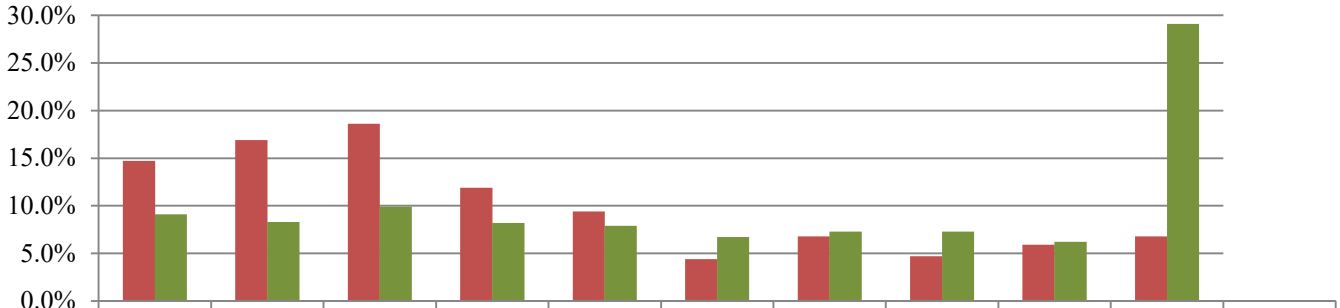
ANNUAL HOUSEHOLD INCOME AND INSURANCE STATUS

The Affordable Care Act (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).Though the Affordable Care Act (ACA) drastically increased the number of insured children, gains made under the 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).

- 31.6 percent of children who are uninsured reside in households with an annual income of less than $25,000, an increase from the previous year (23.4%).
- 71.5 percent of children who are uninsured live in a household with an annual income of less than $55,000.

Figure 3.2 Child's Insurance Status by Annual Household Income

2020-2021: Uninsured n = 1,417; Insured n =24,943 ; Total n = 26,360



	$0 - $14,999	$15,000 -$24,999	$25,000 -$34,999	$35,000 -$44,999	$45,000 -$54,999	$55,000 -$64,999	$65,000 -$74,999	$75,000 -$84,999	$85,000 -$94,999	$95,000 +	Total
Uninsured	14.7%	16.9%	18.6%	11.9%	9.4%	4.4%	6.8%	4.7%	5.9%	6.8%	100.0%
Insured	9.1%	8.3%	9.9%	8.2%	7.9%	6.7%	7.3%	7.3%	6.2%	29.1%	100.0%

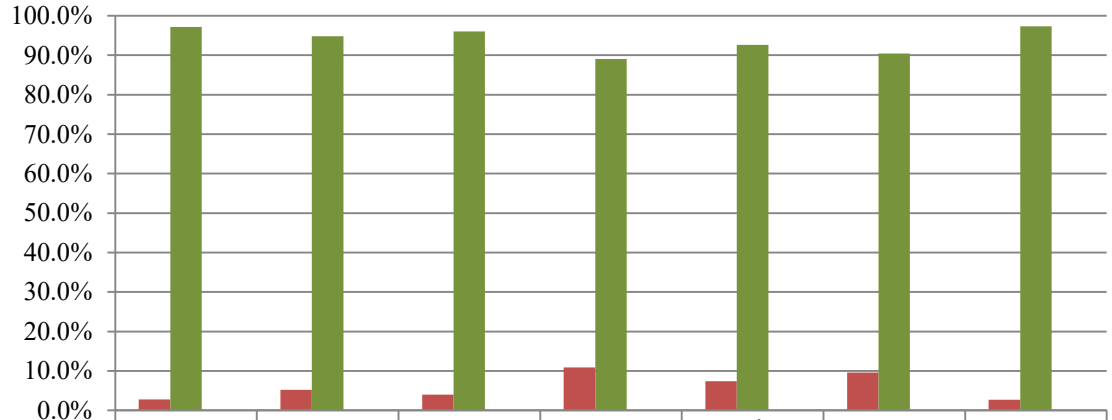
Race/Ethnicity and Insurance Status

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

- The percentage of uninsured is highest among those children identified as Hispanic, "Other Race," and Native American/Alaskan Native (10.9%, 9.6% and 7.4%, respectively).

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

2020-2021: Uninsured n = 1,569; Insured n = 27,562; Total n = 29,131



	African American/ Black	Asian/ Pacific Islander	Caucasian	Hispanic	Native American/ Alaska Native	Other Race	Multiple Races
Uninsured	2.8%	5.2%	4.0%	10.9%	7.4%	9.6%	2.7%
Insured	97.2%	94.8%	96.0%	89.1%	92.6%	90.4%	97.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

INSURANCE STATUS

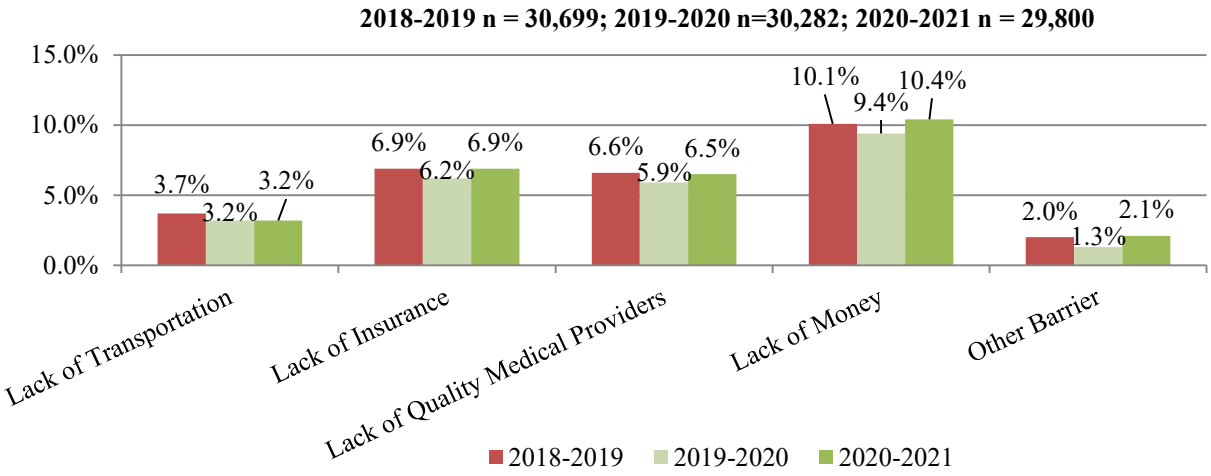
Research suggests that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (The Kaiser Family Foundation, 2019). Approximately 19 percent of Hispanics across the country are uninsured, and approximately 8 percent of Hispanic children are uninsured (Artiga, Oregera, & Damico, 2020). This rate is likely to increase in states, such as Nevada, with large proportions of non-US born Hispanic residents. Although many of these children who are Hispanic are eligible for public health insurance, enrollment is likely not growing due to less enrollment outreach efforts, elimination of the penalties for not having health coverage, language and literacy challenges, and persistent fears surrounding public charge policy (Artiga, Tolbert, & Orgera, 2020).

4 ACCESS TO HEALTHCARE

BARRIERS TO ACCESSING HEALTHCARE

When asked about accessing healthcare for their child, **20.0 percent of respondents reported that they had experienced at least one barrier**. The majority of parents and guardians reported difficulty due to "lack of money," "lack of insurance," or "lack of quality medical providers" for health care services (See Figure 4.1).

Figure 4.1 Types of Barriers When Accessing Health Care for Child



Note. Respondents can 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:

- 80.7 percent reported having health insurance (29.7% Private, 37.2% Medicaid, 4.3% Nevada Check-Up, and 9.4% Other/Multiple)
- 69.1 percent reported an annual household income of less than $55,000.

The most common "other" barriers provided by respondents, from most to least common, included: insurance specific barriers; inability to get an appointment; long wait times for appointments; the distance to get to the provider; the need for childcare coverage to attend the appointments; and inconvenient appointment times.

KNOWLEDGE REGARDING ACCESSING SUPPORT SERVICES

A question was added in the 2013-2014 survey to assess levels of knowledge regarding accessing support services and to better understand why parents/guardians might experience difficulty accessing services.

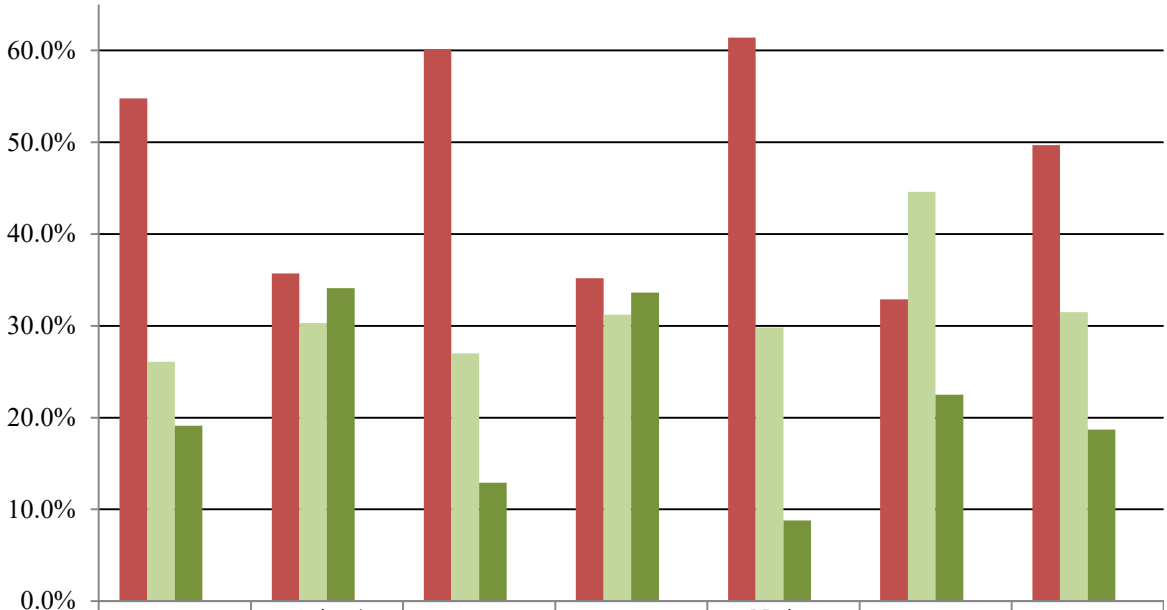
Overall, 20.6 percent (n = 5,886) reported that they did not know how to access support services and 29.2 percent of respondents were somewhat or not really aware of how to access support

services. Respondents in Clark County (48.1%) were less likely to know how to access services than those in Washoe County (56.2%) and Rural Counties (54.5%).

When exploring race/ethnicity and differences in knowledge, results indicate that those who classified themselves as Asian/Pacific Islander or Hispanic reported having less knowledge about accessing support services compared to the other groups.

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

2020-2021: African American n = 1,538; Asian/Pacific Islander n = 1,621; Caucasian n = 12,159; Hispanic n = 6,467; Native American/Alaska Native n = 215; Other n = 222; Multiple n = 6,042



	African American	Asian / Pacific Islander	Caucasian	Hispanic	Native American / Alaska Native	Other Race	Multiple Races
Yes	54.8%	35.7%	60.1%	35.2%	61.4%	32.9%	49.7%
Somewhat / Not Really	26.1%	30.3%	27.0%	31.2%	29.8%	44.6%	31.5%
No	19.1%	34.1%	12.9%	33.6%	8.8%	22.5%	18.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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. Children without health insurance are more likely to forego routine care than insured children. The 2018-2019 National Survey of Children's Health found that 80.2 percent of uninsured children in Nevada do not have a medical home compared to 53.2 percent of those with private health insurance and 63.1 percent for those with Medicaid, and 60.8 percent of uninsured children do not have one or more persons the parent thinks of as their child's personal doctor or nurse compared to 39.2 percent of those with insurance (Child and Adolescent Health Measurement Initiative, 2018-2019).

Having access to regular primary care services or a medical home is another 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 that regularly see a primary care provider who coordinates and organizes their care tend to have better health statuses compared to children without access to a primary care provider (Children Now, 2014).

ROUTINE CARE FOR KINDERGARTEN STUDENTS

Current survey results show that 86.8 percent of kindergarteners had at least one routine medical check-up in the twelve months preceding the survey. Similarly, 92.0 percent of parents reported that their child had a primary care provider (See, Figure 5.1).

Compared to 2019-2020 data:

- Slightly fewer children did not have a primary care provider in this year's survey (8.0%) compared to last year's survey (10.7%) (See Appendix A, Table 10.1).
- More children did not have a routine checkup in this year's survey (13.2%) than in the prior year (9.4%) (See Appendix A, Table 10.1).

Health insurance can be a factor in accessing care. In the current sample, 94.5 percent of children with health insurance have a primary care provider while 49.0 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 12 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, 30.1 percent did not have a primary care provider.

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

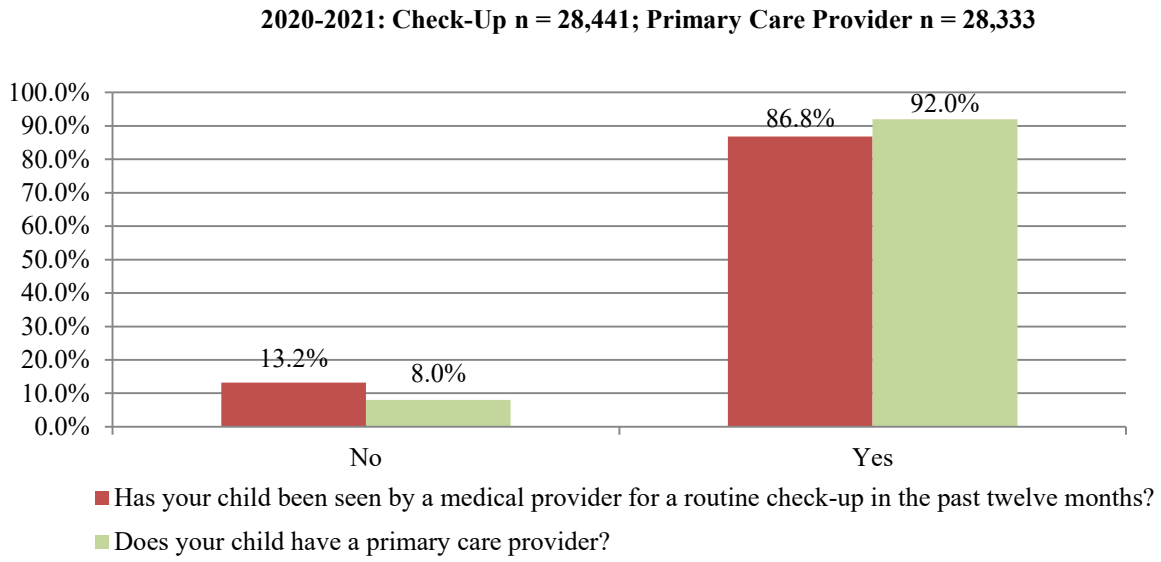
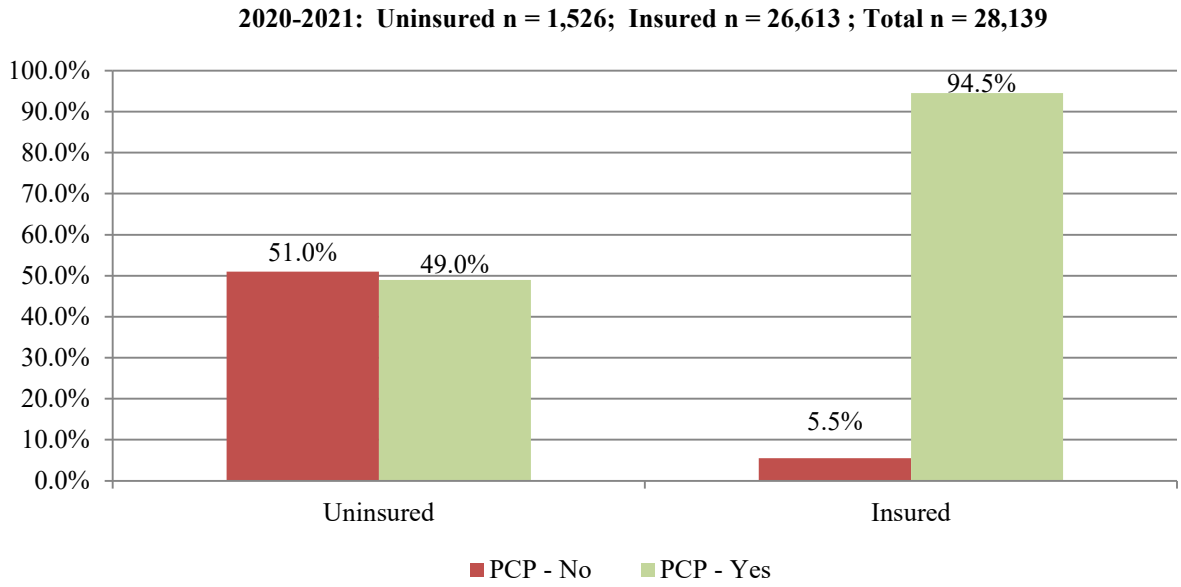
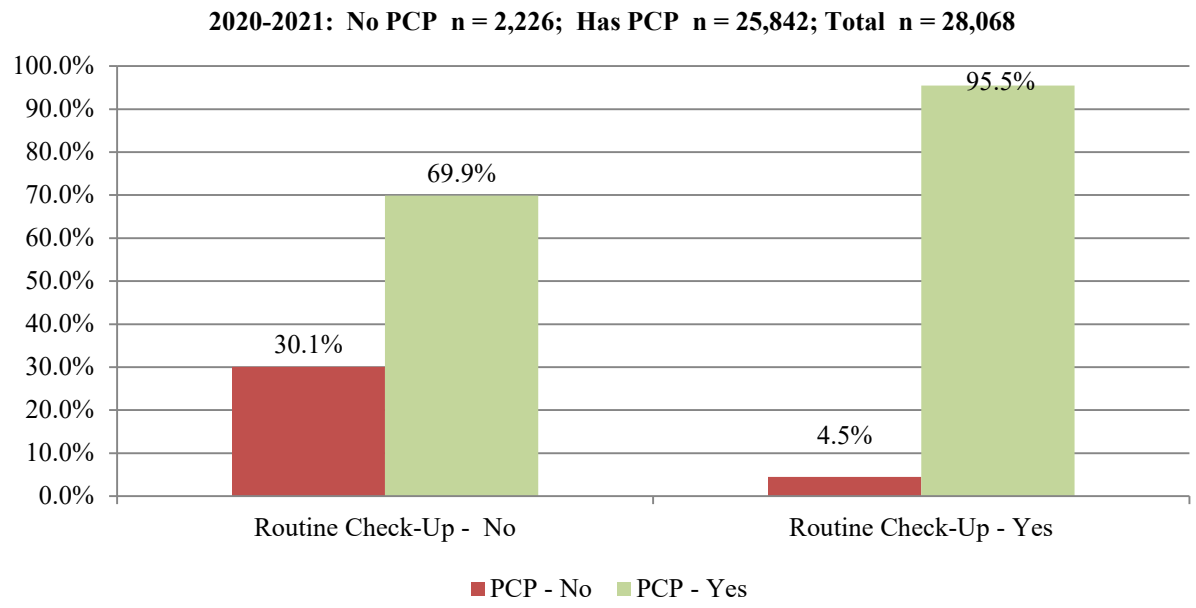


Figure 5.2 Presence of Primary Care Provider by Child's Insurance Status



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



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

6 MEDICAL CONDITIONS

Many of Nevada's children have medical conditions. 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 healthcare needs, as it improves their chances of having ongoing care and treatment.

TYPES OF MEDICAL CONDITIONS

According to the National Survey of Children's Health (2018-2019), in Nevada, 15.5 percent of children aged zero to seventeen, and 11 percent of children aged zero to five have special health care needs. The criteria for children to be designated as having a special 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 45.8 percent of Nevada's children with special health care needs, aged zero to seventeen, had adequate and continuous insurance in the past year (Child and Adolescent Health Measurement Initiative, 2018-2019).

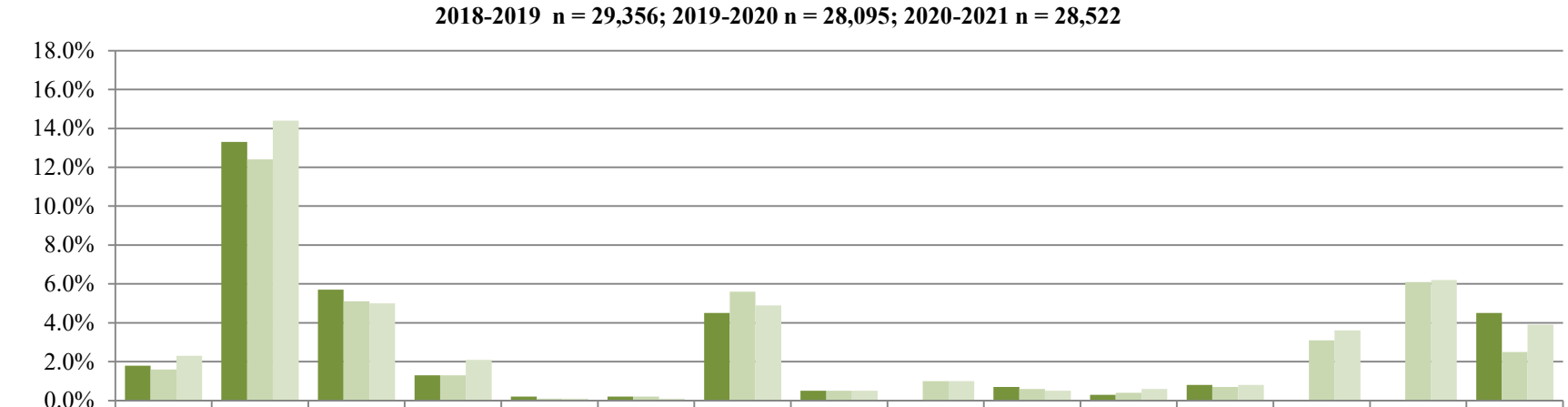
For the 2019-2020 survey, the medical condition response options of heart condition/disorder, skin condition, and speech delays were added.

According to this year's survey results, **39.2 percent of parents reported that their child had a medical condition** (See Figure 6.1).

- The highest reported medical condition was allergies (14.4%), followed by speech delays (6.2%).

There was 3.9 percent of respondents that indicated that their child had an "other" health condition not listed on the survey. Such "other" conditions included digestive issues, neurological/brain problems, hormone issues, and musculoskeletal concerns.

Figure 6.1 Types of Medical Conditions in Children



	ADD/ ADHD	Allergy	Asthma	Autism	Cancer	Diabetes	Glasses/ Contacts	Hearing Impaired	Heart Condition/ Disorder	Mental Health	Physical Disability	Seizures	Skin Condition	Speech Delays	Other
2018-2019	1.8%	13.3%	5.7%	1.3%	0.2%	0.2%	4.5%	0.5%	—	0.7%	0.3%	0.8%	—	—	4.5%
2019-2020	1.6%	12.4%	5.1%	1.3%	0.1%	0.2%	5.6%	0.5%	1.0%	0.6%	0.4%	0.7%	3.1%	6.1%	2.5%
2020-2021	2.3%	14.4%	5.0%	2.1%	0.1%	0.1%	4.9%	0.5%	1.0%	0.5%	0.6%	0.8%	3.6%	6.2%	3.9%

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

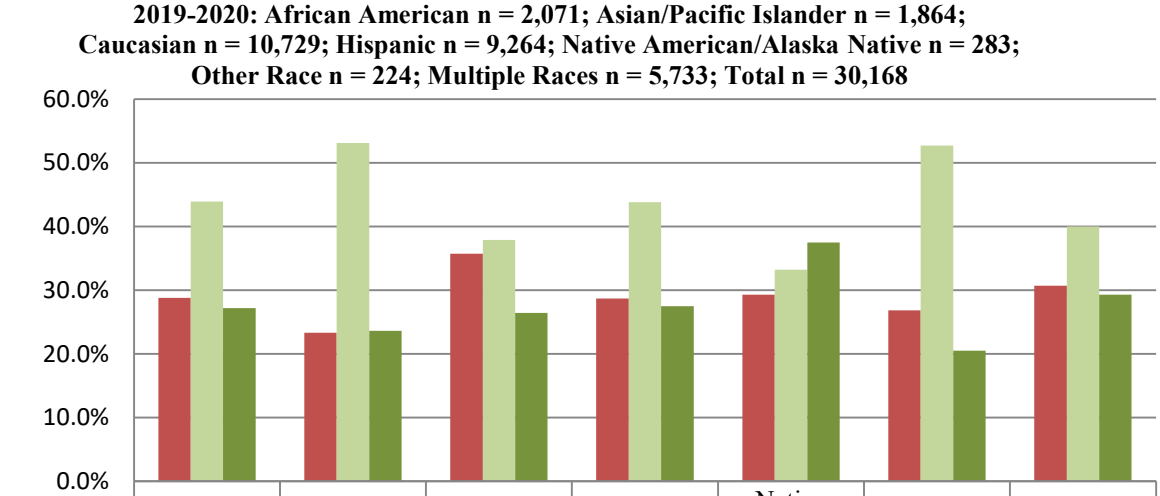
DEVELOPMENTAL SCREENING

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, 2014; Vitrikas, Savard, & Bucai, 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, 2020). Therefore, a question on the current survey asked respondents whether or not their child had received a developmental screening in the past 12 months before the survey.

Of all respondents who answered this question (*n* = 28,483), 42.2 percent reported that their child did not have a developmental screening and 26.7 percent reported that they were unsure. When exploring differences among the counties, more respondents in Washoe County (37.7%) reported that their child had been screened for developmental concerns as compared to Rural Counties (33.7%) and Clark County (29.2%) (See Appendix A, Table 10.1).

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

Figure 6.2 Developmental Screening by Child's Race/Ethnicity



	African American	Asian / Pacific Islander	Caucasian	Hispanic	Native American / Alaska Native	Other Race	Multiple Races
Yes	28.8%	23.3%	35.7%	28.7%	29.3%	26.8%	30.7%
No	43.9%	53.1%	37.9%	43.8%	33.2%	52.7%	40.0%
Not Sure	27.2%	23.6%	26.4%	27.5%	37.5%	20.5%	29.3%

7 DENTAL CARE

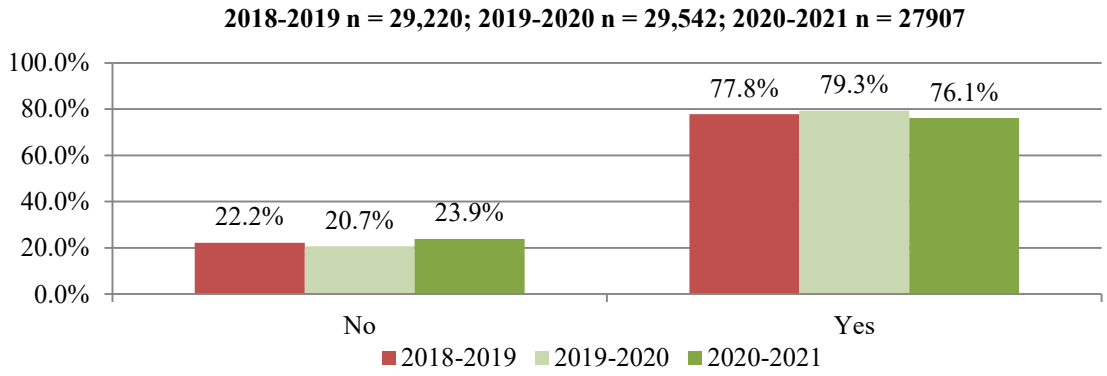
Routine dental care is also important to children's health and daily functioning. Children without access to regular dental care are more likely to experience dental problems such as dental cavities and tooth abscesses. Dental problems have been linked to poor performance in school, difficulty concentrating, and problems completing schoolwork (Seirawan, Faust, Mulligan, 2012). Children with oral health problems are more likely to miss more than three or six school days. 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, Lyu, & Wehby, 2019).

Research also indicates that uninsured children are much more likely to have unmet dental needs (e.g., teeth cleanings). Uninsured children are more likely to have lower numbers of dental visits and higher levels of unmet dental needs compared to children who are insured. Between children who are publicly insured and those who are privately insured, children with private insurance have fewer unmet dental needs and more dental visits on average (Zhou, Elyasi, & Amin, 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, 34.4 percent of uninsured children have no dental or oral healthcare visits, while around 16.5 percent of insured children have no dental or oral healthcare visits (Child and Adolescent Health Measurement Initiative, 2018-2019).

DENTAL CARE OF CHILDREN ENTERING KINDERGARTEN

It is generally recommended that children receive regular dental check-ups every six months to a year as soon as they receive their first tooth, or when they are one year old to prevent oral health problems (American Academy of Pediatric Dentistry, 2014). In the current study, 23.9 percent of survey respondents indicated that their kindergartener had not seen a dentist in the past twelve months, which is a slight increase compared to last year (20.7%) (See Figure 7.1).

Figure 7.1 Child's Dental Visit



8 MENTAL HEALTH

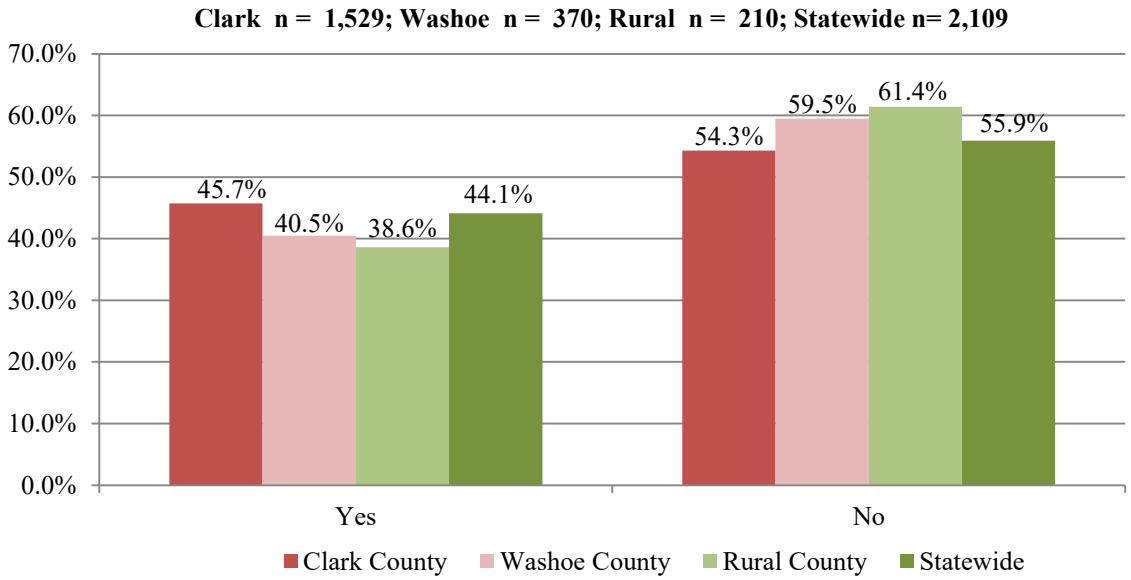
Many of Nevada's children have mental health conditions that require specialized treatment. It is important that these children have regular access to mental health services. This is particularly true for young children entering the elementary school system. Nationally, 7.7 million children and teens have at least one treatable mental health disorder, yet only half of these children receive treatment from a mental healthcare professional. State-level practices and policies may play a role as to why children do not receive the treatment that they need (Whitney & Peterson, 2019). In Nevada, 22.2 percent of children ages three to seventeen, and 13.7 percent of those three to five years of age, have at least one mental health condition; and 48.0 percent of those children three to seventeen do not receive the treatment they need (8.7%) or had a difficult time obtaining care (Child and Adolescent Health Measurement Initiative, 2018-2019). 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, Neece, Fenning, Crnic, & Blacher, 2010; Scott, Mihalopoulos, Erskine, Roberts, & Rahman, 2016).

Learning difficulties and developmental delays will be further exacerbated by COVID-19, as children face new challenges with virtual instruction in their familial environment. Families might experience 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 the children (American Psychological Association, 2020). 65% of parents with children aged 5-7 felt that the pandemic made the 2019-2020 school year extremely stressful, and parents reported higher levels of stress related to the pandemic than those who are not parents (American Psychological Association, 2020). Children may feel isolated from their peers, without fully understanding the social limitations or regulations (Nevada Division of Child and Family Services (NVDCFS), 2020). Children might experience grief from losing loved ones or family members more often due to COVID-19 (NVDCFS, 2020).

The survey results indicate that **8.1 percent of respondents have tried to access mental health services for their children**, which was a slight increase from 2019-2020 data (7.1%).

- **Of the 8.1 percent that attempted to access services, 44.1 percent reported having trouble obtaining the services,** a slight increase from the previous survey year (40.0%).
    - When examining this percentage across counties, those in Clark County (45.7%) reported more trouble obtaining services than in Washoe County (40.5%) or in Rural Counties (38.6%) (See Figure 8.1).
    - The most common barriers provided by respondents regarding accessing mental health services, from most to least common, included: lack of providers; insurance specific barriers; long wait times; providers not willing to work with young children; providers not returning phone calls, and the cost of services.

Figure 8.1 Trouble Obtaining Mental Health Services by County



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 has more than doubled in U.S. 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, Wintfeld, Li, Alas, Langer, & Hammer, 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 are asked to write-in their child's height and weight information to calculate a Body Mass Index (BMI) value 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 4 or over the age of 6, 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 lbs., the child was excluded from the analysis. The inclusion criteria resulted in 12,540 (39.5 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 5th percentile
Healthy Weight	BMI from the 5th percentile to less than the 85th percentile
Overweight	BMI from the 85th percentile to less than the 95th percentile
Obese	BMI equal to or greater than the 95th percentile

Source: Centers for Disease Control and Prevention (2011a). About BMI for Children and Teens. Retrieved from http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html#What is BMI percentile

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

Females				
	Weight Status Category			
Age	Underweight	Healthy Weight	Overweight	Obese
4.0	0 < BMI < 13.725	13.725 <= BMI < 16.808	16.808 <= BMI < 18.028	BMI >= 18.028
4.5	0 < BMI < 13.614	13.614 <= BMI < 16.760	16.760 <= BMI < 18.084	BMI >= 18.084
5.0	0 < BMI < 13.527	13.527 <= 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 <= BMI < 18.808	BMI >= 18.808
Males				
	Weight Status Category			
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 <= BMI < 16.852	16.852 <= 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

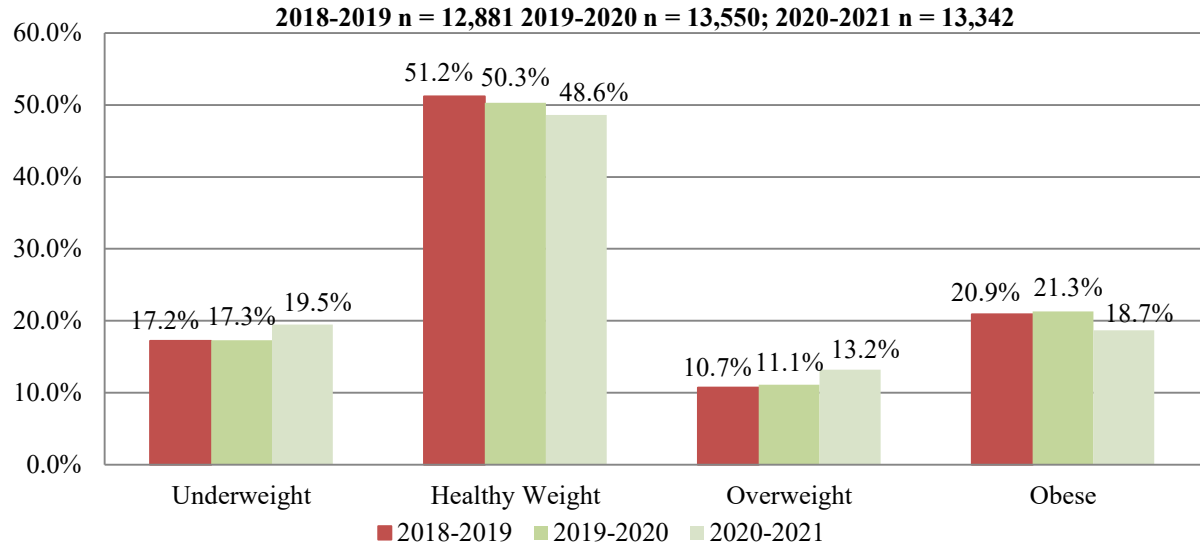
Source: Centers for Disease Control and Prevention (2001). Body Mass for Age Tables. Retrieved from http://www.cdc.gov/growthcharts/html_charts/bmiagerev.htm

Based on the calculated BMI for this year's sample, slightly less than half (48.6%) of the children were categorized as being at a healthy weight, a rate fairly consistent with the previous school year (50.3%) (See Figure 9.1). However,

- **19.5 percent of children were underweight**
  - The Rural Counties (15.5%) had lower percentages of underweight children as compared to Clark County (20.1%) and Washoe County (19.3%) (See Appendix A, Table 10.1).
- **13.2 percent of children were overweight**
  - Washoe County (12.6%) had a lower percentage of overweight children as compared to Rural Counties (13.4%) and Clark County (13.2%) (See Appendix A, Table 10.1).
- **18.7 percent of children were considered obese**
  - The Rural Counties (25.2%) had a higher percentage of obese children as compared to Clark County (17.0%) and Washoe County (22.7%) (See Appendix A, Table 10.1).

The percentage of overweight children has increased slightly compared to the previous year while the percentage of obese children has slightly decreased.

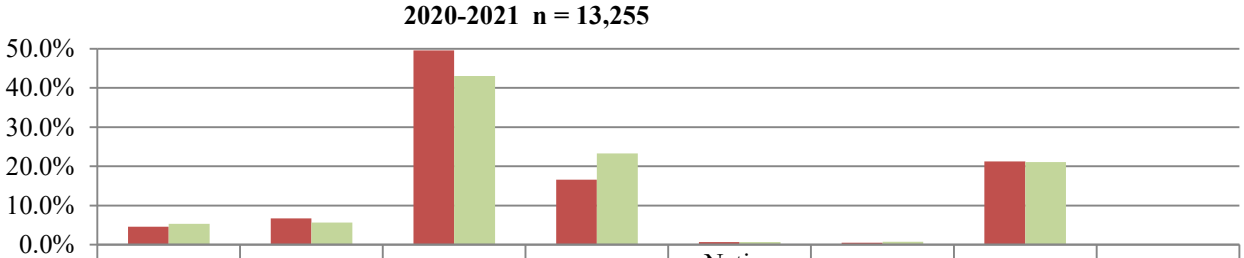
Figure 9.1 Child's Weight Status Category



When comparing each child's race/ethnicity with his or her 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 are fewer 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 race/ethnic demographics of the survey sample as a whole, with the greatest discrepancy being the percentage of Hispanic children with valid BMI data. Though respondents who reported their child as Hispanic comprised 23.3 percent of the total sample, Hispanic comprised only 16.6 percent of those with a valid BMI. Figure 9.2 illustrates the race/ethnicity data for children with a valid BMI.

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

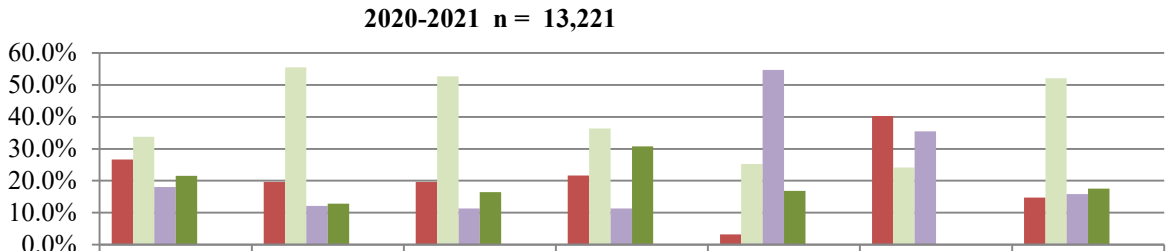


	African American/ Black	Asian/ Pacific Islander	Caucasian	Hispanic	Native American/ Alaska Native	Other Race	Multiple Races	Total
% w/Valid BMI	4.6%	6.7%	49.6%	16.6%	0.7%	0.5%	21.3%	100.0%
% Total Sample	5.3%	5.7%	43.1%	23.3%	0.7%	0.8%	21.1%	100.0%

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

- The highest percentage of obese children were Hispanic children (30.8%) and African American/Black children (21.5%).
- Children identified as being "Other Race" had the lowest percentage of obesity (0.0%), as well as the highest percentage of children who were underweight (40.3%).
- Children identified as "Native American or Alaskan Native" had the second lowest percentage of children who were underweight (3.2%).

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



	African American / Black	Asian/ Pacific Islander	Caucasian	Hispanic	Native American / Alaska Native	Other Race	Multiple Races
Underweight	26.7%	19.6%	19.6%	21.6%	3.2%	40.3%	14.7%
Healthy Weight	33.8%	55.5%	52.7%	36.4%	25.3%	24.2%	52.1%
Overweight	18.0%	12.1%	11.3%	11.3%	54.7%	35.5%	15.8%
Obese	21.5%	12.8%	16.4%	30.8%	16.8%	0.0%	17.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
*Total % Valid BMI	4.6%	6.7%	49.6%	16.6%	0.7%	0.5%	21.3%

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. Lower levels of physical activity, increased time spent participating in sedentary behaviors such as watching television and playing video games, and increased consumption of products such as soft drinks are known to be related to higher BMIs (Koning et al., 2016; Lowry et al., 2015). 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

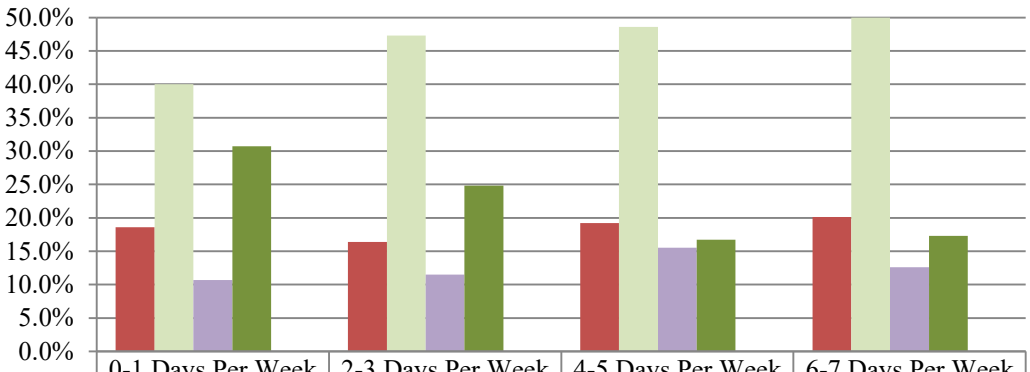
Parents/guardians were asked to report the number of times per week their child is physically active for at least 60 minutes. For those that responded (n = 26,909), **almost half (44.6%) indicated that their child was physically active six to seven days a week for at least sixty minutes at a time and 1.6 percent indicated that their child was not active during the week.**

Figure 9.4 details 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 18.8 percent reported activity two to three days per week.
- Overall, as days of physical activity per week increased, kindergarteners were more likely to be in the healthy 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).

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

2020-2021 n = 13,276



	0-1 Days Per Week	2-3 Days Per Week	4-5 Days Per Week	6-7 Days Per Week
Underweight	18.6%	16.4%	19.2%	20.1%
Healthy Weight	40.0%	47.3%	48.6%	50.0%
Overweight	10.7%	11.5%	15.5%	12.6%
Obese	30.7%	24.8%	16.7%	17.3%
* Total % Valid BMI	2.1%	18.8%	29.7%	49.4%

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 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 frequently reported barrier was COVID-19, followed by weather, lack of time and/or a busy work schedule. 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, on an average weekday, about half of respondents (43.2%) reported that their child spends one to two hours in front of a TV or electronic device watching TV, videos, or playing video games. On the weekend, the percent of children reported to be spending one to two hours in front of a TV or electronic device decreased to 35.1 percent. The percent of children

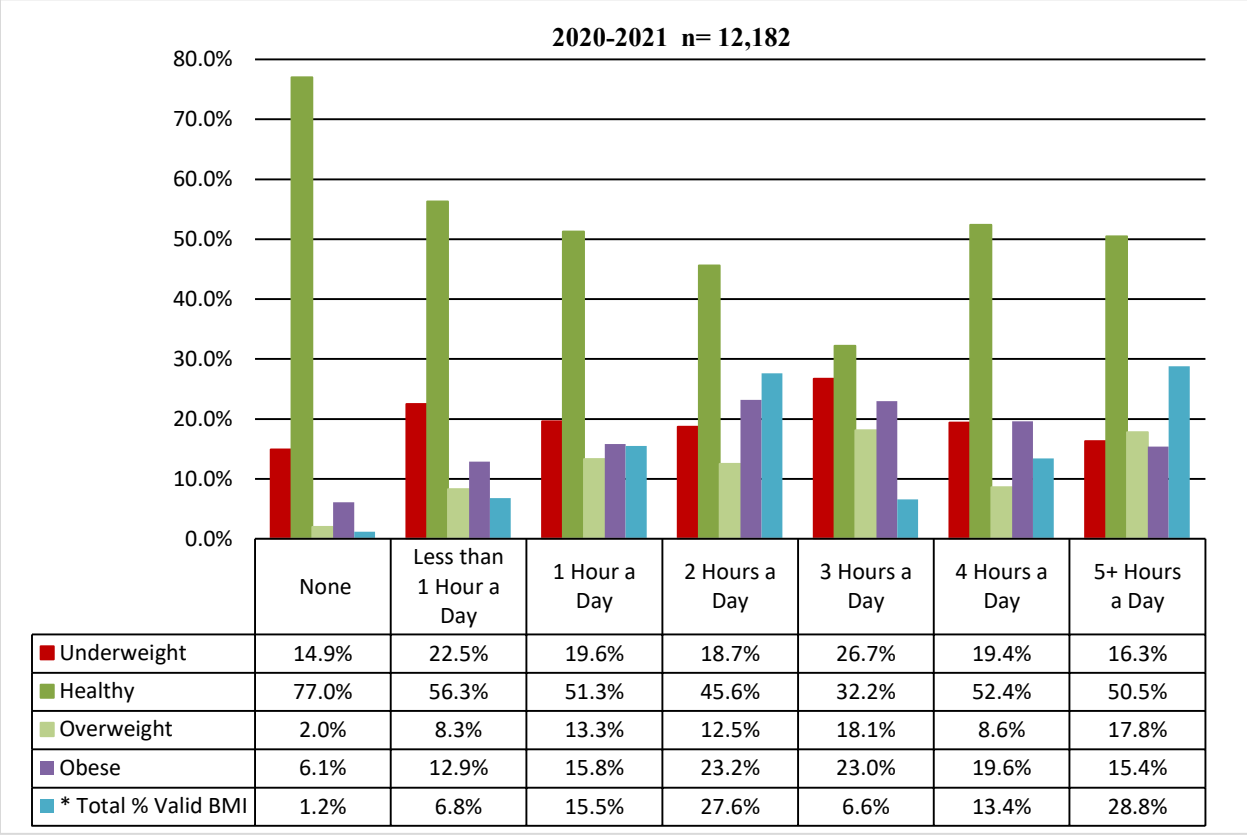
spending three or more hours in front of a TV or electronic device increased only slightly on the weekend (58.8%) compared to an average weekday (50.7%).

Table 9.3 Number of Hours Spent on Electronic Devices

	Average Weekday	Weekend
None	0.7%	1.2%
Less than 1 hour	5.3%	5.0%
1 hour	14.2%	8.7%
2 hours	29.0%	26.4%
3 hours	7.1%	25.5%
4 hours	15.0%	16.1%
5 or more hours	28.6%	17.2%

When comparing the average number of hours that a child spends in front of a TV or electronic device on an average weekday with his or her BMI (See Figure 9.5), it appears that as TV viewing and the use of electronic devices increases to 3 hours a day, the likelihood of a child being obese also increases. Watching no TV and not using electronic devices on an average weekday seem to have the biggest impact on children having a healthy weight.

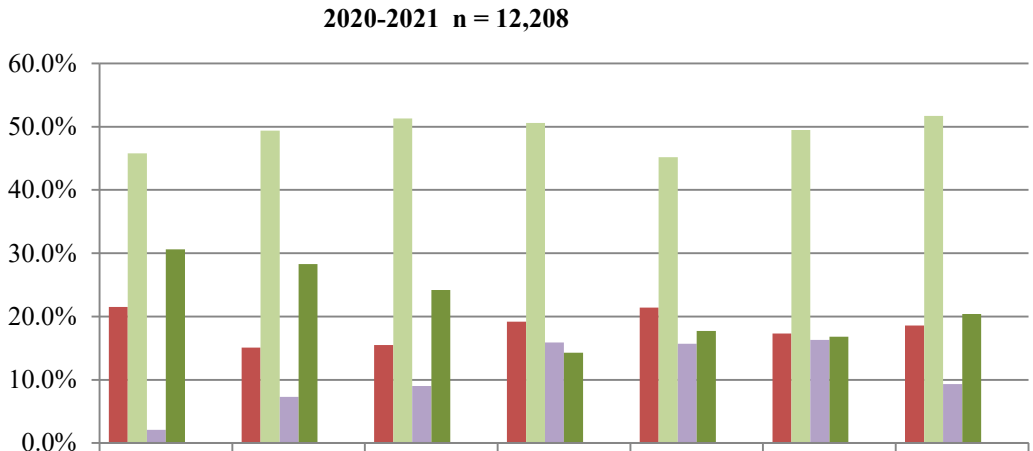
Figure 9.5 Child's Weight Status Category by Hours Spent on Electronic Devices on an Average Weekday



	None	Less than 1 Hour a Day	1 Hour a Day	2 Hours a Day	3 Hours a Day	4 Hours a Day	5+ Hours a Day
Underweight	14.9%	22.5%	19.6%	18.7%	26.7%	19.4%	16.3%
Healthy	77.0%	56.3%	51.3%	45.6%	32.2%	52.4%	50.5%
Overweight	2.0%	8.3%	13.3%	12.5%	18.1%	8.6%	17.8%
Obese	6.1%	12.9%	15.8%	23.2%	23.0%	19.6%	15.4%
* Total % Valid BMI	1.2%	6.8%	15.5%	27.6%	6.6%	13.4%	28.8%

Similarly, when comparing the average number of hours that a child spends in front of a TV or electronic device on the weekend with his or her BMI (see Figure 9.6), it appears that TV viewing and the use of electronic devices for 2 hours a day has the lowest percentage of obesity in this sample.

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



	None	Less than 1 Hour	1 Hour	2 Hours	3 Hours	4 Hours	5+ Hours
Underweight	21.5%	15.1%	15.5%	19.2%	21.4%	17.3%	18.6%
Healthy	45.8%	49.4%	51.3%	50.6%	45.2%	49.5%	51.7%
Overweight	2.1%	7.3%	9.0%	15.9%	15.7%	16.3%	9.3%
Obese	30.6%	28.3%	24.2%	14.3%	17.7%	16.8%	20.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%
*Total % Valid BMI	1.2%	4.8%	8.0%	25.3%	26.4%	17.2%	17.2%

Soda Consumption: Non-Diet Soda

According to the 2017-2019 Nevada High School Youth Risk Behavior Survey Comparison Report, 11.8 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, which was below the national average of 18.7 percent (Diedrick et al., 2019). To determine similar activity in children entering kindergarten, this same question on soda consumption was included on the survey starting in the 2011-2012 school year.

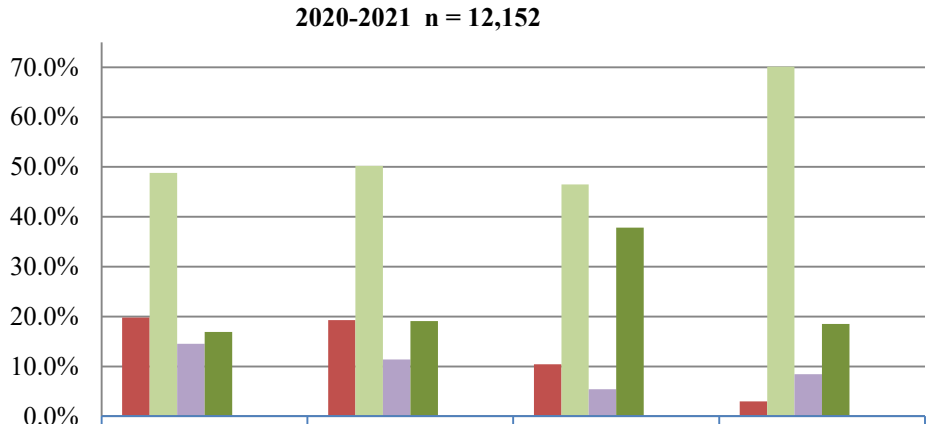
Results indicate that:

- The majority of children either did not drink any non-diet soda (71.6%) or drank some a few times per week (20.9%).
    - The percentage of children who do not drink any non-diet soda is lowest in the Rural Counties (68.3%), is slightly higher in Clark County (71.6%), and is the highest in Washoe County (73.1%) (See Appendix A, Table 10.1).
- A total of 4.0 percent of respondents reported that their child drank non-diet soda once a day and 3.5 percent indicated that their child drank non-diet soda more than once a day.

A higher percentage of children in Rural Counties (4.9%) drink at least one non-diet soda a day, as compared to Clark County (4.0%) and Washoe County (3.6%) (See Appendix A, Table 10.1).

Of the respondents with kindergarteners having a valid BMI, most reported that their child had less than one non-diet soda a day (95.0%). Figure 9.7 illustrates children's weight status category by the number of non-diet sodas consumed in one week. Rates of obesity are highest in children who drank non-diet soda once a day (37.8%) and a few times during the week (19.1%).

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



	None	A Few Times	One a Day	More than One a Day
Underweight	19.8%	19.3%	10.4%	3.0%
Healthy	48.8%	50.2%	46.5%	70.1%
Overweight	14.5%	11.4%	5.4%	8.4%
Obese	16.9%	19.1%	37.8%	18.5%
Total	100.0%	100.0%	100.0%	100.0%
*Total % Valid BMI	73.7%	21.3%	2.5%	2.5%

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.

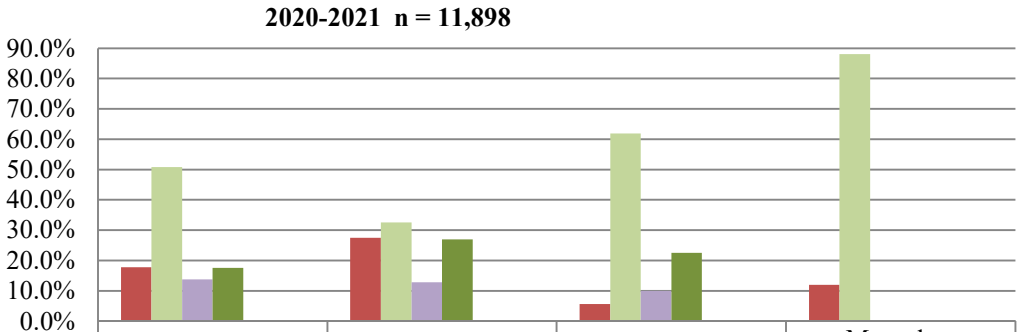
Results indicate that:

- The majority of children in the current study did not drink any diet soda (88.3%).
    - The percentage of children who did not drink any diet soda was lowest in Clark County (87.8%), slightly higher in Washoe County (89.4%), and the highest in the Rural Counties (89.7%) (See Appendix A, Table 10.1).

- A total of 8.8 percent reported that their child drank diet soda a few times a week, 1.9 percent reported daily consumption, and 1.0 percent reported consuming more than once a day.
    - In Clark County, more children drank diet soda a few times a week (9.1%), followed by Washoe County (8.2%) and then by the Rural Counties (7.6%).
    - The Rural Counties (2.2%) reported slightly higher rates of diet soda consumption once a day than Clark County (1.9%) and Washoe County (1.9%) (See Appendix A, Table 10.1).

When looking at children's weight status categories by the number of diet sodas drank in one week, it appears that children who drink diet soda more than once a day have the lowest percentage of obesity and the highest percentage of healthy weight children. However, it is difficult to project a relationship given that so few of the respondents reported that 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).

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



	None	A Few Times	One a Day	More than One a Day
Underweight	17.8%	27.5%	5.6%	12.0%
Healthy	50.8%	32.6%	61.9%	88.0%
Overweight	13.8%	12.8%	10.0%	0.0%
Obese	17.6%	27.0%	22.5%	0.0%
Total	100.0%	100.0%	100.0%	100.0%
*Total % Valid BMI	89.5%	8.5%	1.3%	0.6%

*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, coupled with a wide 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, Scharf, & Deboer, 2016; Wojcicki &

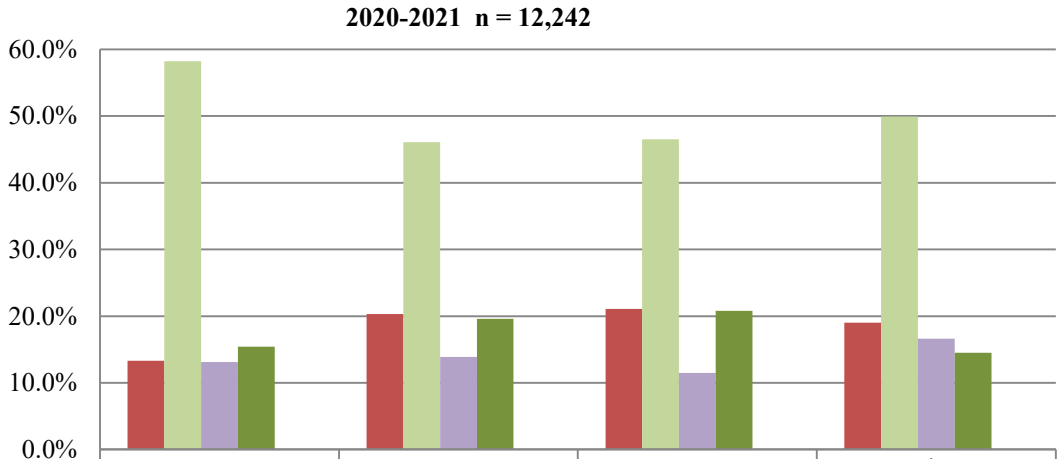
Heyman, 2012). Because of the current debates over the impact of consumption of juice on children's health benefits, a question was added in the 2013-2014 survey year.

Results indicate that:

- The majority of children in the current study drank juice a few times a week (45.5%), once a day (22.9%), or more than once a day (13.1%).
    - A higher percentage of children in the Rural Counties drank juice more than once a day (14.7%) in comparison to Clark County (13.7%) and Washoe County (9.7%) (See Appendix A, Table 10.1).
- 18.5 percent reported that their child did not drink juice.
    - A higher percentage of children in Washoe County did not drink juice (19.4%) as compared to Clark County (18.7%) and the Rural Counties (15.7%) (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 when juice is consumed more than once a day, there is a rise in the percentage of overweight children and a rise in obese children when consuming juice a few times a week or once a day (See Figure 9.9). However, it is difficult to project a relationship given the sample of respondents in each category. Thus, results should be interpreted with caution.

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



	None	A Few Times	One a Day	More than One a Day
Underweight	13.3%	20.3%	21.1%	19.0%
Healthy	58.2%	46.1%	46.5%	49.9%
Overweight	13.1%	13.9%	11.5%	16.6%
Obese	15.4%	19.6%	20.8%	14.5%
*Total % Valid BMI	20.3%	46.7%	20.9%	12.0%

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

Infant Feeding Behaviors

Breastfeeding has been shown to have many health benefits for both the breastfeeding mother and their child. Breastfeeding has been associated with reduced risk of cancer, diabetes, obesity, and postpartum depression in the mother, and improved cognitive development and reduced risk of cancer, ear infections, gastrointestinal issues, allergies, SIDS, obesity, hypertension, cardiovascular disease, hyperlipidemia, and diabetes in children (Binns, Lee, & Low, 2016; DHHS, 2011).

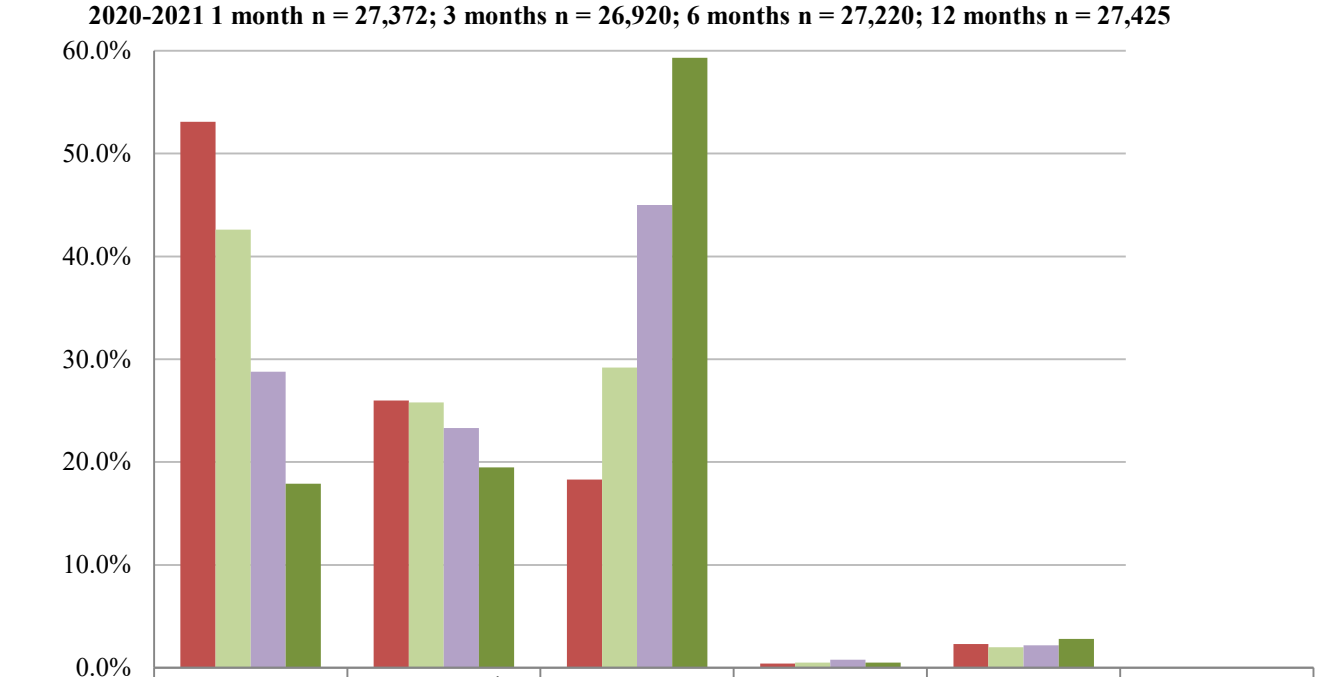
Starting in 2007, the CDC began issuing annual Breastfeeding Report Cards that provide both national and state-level data. According to the 2020 report card, Nevada is below the national average for babies who have ever been breastfed (US =84.1%; NV =81.8%), below the national average for exclusive breastfeeding at six months (US =25.6%; NV =21.7%), and below the national average for exclusive breastfeeding at three months (US =46.9%; NV =40.9%) (CDC, 2020).

A question was added to the 2012-2013 survey to obtain more detailed information about breastfeeding practices in Nevada to determine feeding practices of children entering kindergarten when they were one, three, six, and twelve months old. As illustrated in Figure 9.10, 51.4 percent of respondents indicated that their child was breastfed exclusively at one month old.

The Healthy People 2030 breastfeeding objectives aim to increase the proportion of infants who are breastfed at one year (54.1%), and exclusively through six months of age (42.4%) (DHHS, 2021). According to the 2020-2021 KHS survey, 28.8 percent of children entering kindergarten in Nevada were exclusively breastfed at six months and 19.5 percent of those who responded breastfed at twelve months.

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 (DHHS, 2011). The KHS expanded in 2014-2015 to capture information regarding barriers to breastfeeding. In 2020-2021, of those who wrote in barriers to breastfeeding, the most frequently cited barriers, from most to least common, included lack of milk production, lack of time due to work or school, difficulties in latching, and illness.

Figure 9.10 Infancy Feeding Habits

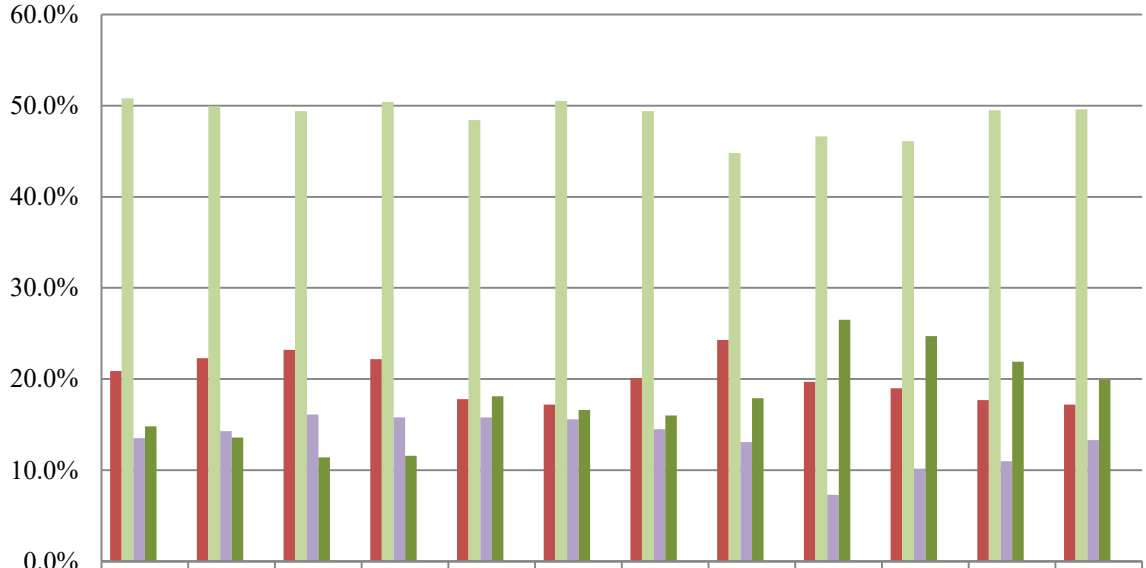


	Breast Only	Breast and Formula/Other	Formula/Other	Multiple	Not Sure	
1 Month	53.1%	26.0%	18.3%	0.4%	2.3%	100.0%
3 Months	42.6%	25.8%	29.2%	0.5%	2.0%	100.0%
6 Months	28.8%	23.3%	45.0%	0.8%	2.2%	100.0%
12 Months	17.9%	19.5%	59.3%	0.5%	2.8%	100.0%

The literature is inconclusive regarding the relationship between breastfeeding as a protective factor for obesity. Some research has indicated that breastfeeding has small preventative effects against obesity in children (Azad et al., 2018; Gubbels, Thijs, Stafleu, Van Buuren, & Kremers, 2011). Figure 9.11 illustrates child weight status categories by infant feeding behaviors. Children who received breast milk exclusively at all time periods have slightly higher percentages of children in the healthy weight category compared to those children who received both breast milk and formula or formula only.

Figure 9.11 Child Weight Status Category by Infancy Feeding Habits

2020-2021 1 Month n = 12,586; 3 Months n = 12,367; 6 Months n = 12,493; 12



	1M	3M	6M	12M	1M	3M	6M	12M	1M	3M	6M	12M
	Breast Only				Breast & Formula/Other				Formula/Other			
Underweight	20.9%	22.3%	23.2%	22.2%	17.8%	17.2%	20.1%	24.3%	19.7%	19.0%	17.7%	17.2%
Healthy	50.8%	49.9%	49.4%	50.4%	48.4%	50.5%	49.4%	44.8%	46.6%	46.1%	49.5%	49.6%
Overweight	13.5%	14.3%	16.1%	15.8%	15.8%	15.6%	14.5%	13.1%	7.3%	10.2%	11.0%	13.3%
Obese	14.8%	13.6%	11.4%	11.6%	18.1%	16.6%	16.0%	17.9%	26.5%	24.7%	21.9%	19.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Valid BMI	54.1%	43.7%	28.7%	17.3%	25.6%	25.4%	24.6%	21.9%	18.0%	28.6%	44.1%	57.5%

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.

APPENDIX A. COMPARISON OF SURVEY RESULTS

SUMMARY OF WEIGHTED RESULTS BY COUNTY AND YEAR

SUMMARY OF 2020-2021 WEIGHTED SURVEY RESULTS BY COUNTY

Table 10.1 below outlines the percentages of responses for the 2020-2021 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 2020-2021 Weighted Survey Results by County

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Survey Participation	--	72.5	17.8	9.7
Demographic Information				
Gender of Kindergartener				
Male	52.3	52.6	52.2	50.8
Female	47.4	47.1	47.8	49.2
Other	0.2	0.3	0.0	0.0
Race/Ethnicity of Kindergartener				
African American/Black	5.3	6.9	1.5	0.6
Asian/Pacific Islander	5.7	6.8	3.7	1.0
Caucasian	43.1	38.8	51.7	59.4
Hispanic	23.3	23.3	25.2	19.7
Native American/ Alaska Native	0.7	0.4	1.0	2.6
Other Race	0.8	0.8	0.8	0.4
Multiple Races	21.1	23.0	16.1	16.4
Single Parent or Guardian	24.7	24.2	25.3	27.1
Average # of Children in Household	2.50	2.52	2.47	2.47
(Standard Deviation)	(1.45)	(1.56)	(1.15)	(1.11)
Average # of Adults in Household	2.14	2.18	2.02	2.04
(Standard Deviation)	(1.09)	(1.17)	(0.82)	(0.70)
Average Age of Mother/Guardian	34.99	35.28	34.67	33.39
(Standard Deviation)	(6.47)	(6.39)	(6.28)	(7.09)
Average Age of Father/Guardian	37.36	37.58	37.30	35.81
(Standard Deviation)	(8.10)	(8.30)	(7.28)	(7.78)

Table 10.1 ***continued***

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Annual Household Income of Survey Respondents				
$0-$14,999	9.5	10.9	4.2	7.6
$15,000-$24,999	8.8	9.2	7.3	8.9
$25,000-$34,999	10.4	9.6	13.7	11.5
$35,000-$44,999	8.5	8.2	8.9	10.6
$45,000-$54,999	7.9	8.2	5.9	9.5
$55,000-$64,999	6.6	6.4	5.1	11.4
$65,000-$74,999	7.2	6.7	8.1	9.2
$75,000-$84,999	7.2	7.6	5.7	6.6
$85,000-$94,999	6.2	6.4	5.7	5.0
$95,000+	27.7	26.9	35.2	19.8
Housing				
Tenure				
Renter-Occupied	46.2	47.1	43.7	44.3
Owner-Occupied	53.8	52.9	56.3	55.7
Household Smoking				
Someone in household smokes	13.1	13.1	8.0	22.6
Smoking allowed in home	1.2	1.3	0.4	1.3
Family Events				
None	35.7	33.2	43.8	40.5
Moved to a new home	17.5	16.7	19.8	20.2
Job Change	24.8	26.0	20.5	23.1
Divorce or Separation	5.9	5.6	7.0	6.1
Loss of job or income	28.6	33.3	15.7	15.3
New Child - Birth/Adopt/Foster	10.1	10.4	8.6	10.8
Serious Medical issues in the home	6.8	7.5	4.0	6.7
Death in the family	12.7	14.1	8.4	9.4
Traumatic Event/Disaster/Accident	4.9	5.7	2.4	3.5
Other	6.1	5.5	8.8	6.3
Type of School Child Attended in the Past 12 Months				
None/Stayed at Home	5.8	0.6	19.6	15.1
Friends/Family Care	4.0	3.9	3.6	5.3
Home-Based	25.8	34.6	5.1	5.6
School District Pre-School	12.5	5.3	23.0	41.3
University Campus Pre-School	5.1	6.8	1.2	0.7
Head Start	2.3	0.6	7.0	5.2
Other Facility/Center	28.7	28.4	35.4	17.9
Multiple	15.8	19.7	5.1	8.9

Table 10.1 ***continued***

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Average Preschool Hours of Attendance				
0 Hours	18.1	16.6	23.4	18.9
1-4 Hours	3.5	1.6	6.6	10.1
5-10 Hours	24.4	28.3	12.9	18.8
11-15 Hours	14.1	16.6	6.8	10.5
16-20 Hours	12.6	14.5	8.4	7.6
21-30 Hours	9.3	7.2	14.3	14.5
31-40 Hours	13.1	10.7	20.6	15.5
More than 40 Hours	4.9	4.4	7.0	4.1
Reasons Children Did NOT attend preschool (percentage only of those who stayed home or were in the care of friends/family/neighbors)				
No Challenges / Wanted them home	34.5	29.8	61.9	46.8
Too expensive	18.7	19.1	15.3	20.0
Too far	2.8	2.6	2.9	5.6
Hours not convenient	5.9	6.0	6.1	4.9
No open spots	7.6	6.7	10.0	14.7
Other	8.0	6.8	11.7	17.7
If they could have attended, would they have attended part-time or full time? (percentage only of those who stayed home or were in care of friends/family/neighbors)				
Full Time	57.8	55.4	64.9	63.1
Part Time	32.3	34.2	26.1	29.2
No pre-school	9.9	10.4	9.1	7.6
If they could have attended, what type of facility would you have placed your child in? (percentage only of those who stayed home or were in care of friends/family/neighbors)				
Home-Based	12.6	12.7	13.3	10.1
Facility/Center	36.6	33.9	54.7	30.3
School District Pre-School	50.9	53.4	32.0	59.6
Amount of Days During the Past Week that Someone Read to Child				
None	2.6	2.1	4.5	2.0
1 day	5.0	5.1	4.8	4.6
2 days	8.1	7.8	8.1	9.6
3 days	14.6	14.5	16.0	13.2
4 days	12.0	11.1	13.5	15.6
5 days	17.7	18.0	15.7	19.7
6 days	4.8	4.8	4.5	5.3
7 days	35.2	36.6	32.9	30.1

Table 10.1 ***continued***

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Health Insurance Status and Access to Health Care				
Applied for insurance for child using Nevada Health Link	57.1	73.0	10.6	20.1
Yes, child was approved	83.1	50.0	94.6	72.3
Health Insurance Type				
Uninsured	5.4	5.4	4.4	7.2
Private	54.7	53.5	60.4	52.8
Medicaid	27.5	28.3	24.8	26.9
Nevada Check-up	5.4	6.1	3.5	3.8
Other	2.9	2.5	4.4	3.1
Multiple Types	4.1	4.2	2.5	6.1
Kindergartener Does NOT Have a Primary Care Provider	8.0	6.9	8.7	14.9
Types of Barriers Experienced When Trying to Access Healthcare				
Lack of Transportation	3.2	3.8	1.7	2.0
Lack of Insurance	6.9	7.3	4.6	7.6
Lack of Quality Medical Providers	6.5	7.1	3.3	8.2
Lack of Money/Financial Resources	10.4	12.2	4.1	9.3
Other Barriers	2.1	2.3	1.7	1.6
Know how to access support services	50.2	48.1	56.2	54.5
Difficulties Accessing Mental Health Services for Kindergartener (percentage only for those who tried to access services)	44.1	45.7	40.5	38.6
Routine Care and Health of Kindergartener				
Has Not Had Routine Check-Up in the Last Year	13.2	13.6	10.4	15.8
Has Not Visited a Dentist in the Last Year	23.9	26.8	12.7	22.3

Table 10.1 ***continued***

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Types of Medical Conditions Seen in Kindergarteners				
None	60.8	57.6	74.1	64.7
ADD/ADHD	2.3	2.5	1.2	2.4
Allergies	14.4	15.5	9.8	13.3
Asthma	5.0	5.1	5.1	4.3
Autism	2.1	2.4	0.8	1.6
Cancer	0.1	0.1	0.2	0.1
Diabetes	0.1	0.1	0.0	0.2
Glasses/Contacts	4.9	4.9	3.9	6.2
Hearing Aid/Impairment	0.5	0.5	0.4	0.9
Heart Condition/Disorder	1.0	1.0	0.4	1.5
Mental Health Condition	0.5	0.5	0.0	0.7
Physical Disability	0.6	0.7	0.0	0.8
Seizures	0.8	0.8	0.6	0.7
Skin Condition	3.6	4.0	2.7	2.5
Speech Delays	6.2	5.7	7.6	7.4
Other Condition	3.9	3.7	3.7	5.8
Received a Developmental Screening in past 12 months	31.2	29.2	37.7	33.7
Weight and Health Behaviors				
Underweight	19.5	20.1	19.3	15.5
Healthy Weight	48.6	49.7	45.4	45.8
Overweight	13.2	13.2	12.6	13.4
Obese	18.7	17.0	22.7	25.2
Amount of Days per Week that Child Has at Least 60 Minutes of Physical Activity				
None	1.6	2.0	0.9	0.3
1 Day	1.7	2.1	0.7	0.9
2 Days	7.5	8.9	4.1	4.1
3 Days	14.7	17.1	10.3	7.3
4 Days	11.5	12.3	9.7	8.6
5 Days	18.5	19.3	17.4	15.6
6 Days	7.2	6.3	8.9	9.5
7 Days	37.4	32.1	48.0	53.8

Table 10.1 ***continued***

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
Hours of TV or Electronics on an Average Weekday				
None	0.7	0.7	1.1	0.4
Less than 1	5.3	4.7	6.7	6.9
1 Hour	14.2	11.2	21.1	22.2
2 Hours	29.0	26.5	35.2	35.1
3 Hours	7.1	1.0	24.1	17.8
4 Hours	15.0	18.0	7.4	8.7
5 Hours or More	28.6	37.9	4.4	8.9
Hours of TV or Electronics on an Average Weekend				
None	1.2	1.4	0.7	0.6
Less than 1	5.0	5.4	4.4	3.3
1 Hour	8.7	7.7	11.7	10.1
2 Hours	26.4	24.5	32.4	28.5
3 Hours	25.5	24.3	29.0	27.3
4 Hours	16.1	15.7	15.6	19.2
5 Hours or More	17.2	21.0	6.2	11.0
Number of Times Per Week the Kindergartener Drinks Non-Diet Soda				
None	71.6	71.6	73.1	68.3
A Few Times	20.9	20.4	20.1	25.3
Once a Day	4.0	4.0	3.6	4.9
More Than Once a Day	3.5	4.0	3.1	1.5
Number of Times Per Week the Kindergartener Drinks Diet Soda				
None	88.3	87.8	89.4	89.7
A Few Times	8.8	9.1	8.2	7.6
Once a Day	1.9	1.9	1.9	2.2
More Than Once a Day	1.0	1.2	0.6	0.6
Number of Times Per Week the Kindergartener Drinks Juice				
None	18.5	18.7	19.4	15.7
A Few Times	45.5	45.1	46.6	46.0
Once a Day	22.9	22.4	24.3	23.6
More Than Once a Day	13.1	13.7	9.7	14.7

Table 10.1 ***continued***

Survey Indicator **State** (Percent)	**State** (Percent)	**Clark County** (Percent)	**Washoe County** (Percent)	**Rural Counties** (Percent)
Infancy Eating Habits at One Month				
Breast Only	53.1	49.7	64.1	58.8
Breast and Formula/Other	26.0	28.2	18.6	22.4
Formula/Other	18.3	19.5	15.2	14.9
Multiple	0.4	0.0	0.9	2.1
Not Sure	2.3	2.6	1.1	1.8
Infancy Eating Habits at Three Months				
Breast Only	42.6	39.8	52.1	46.0
Breast and Formula/Other	25.8	27.1	22.1	22.8
Formula/Other	29.2	30.8	23.3	28.0
Multiple	0.5	0.1	1.3	1.4
Not Sure	2.0	2.2	1.1	1.7
Infancy Eating Habits at Six Months				
Breast Only	28.8	27.4	34.0	29.8
Breast and Formula/Other	23.3	22.1	22.2	21.1
Formula/Other	45.0	40.4	43.9	50.1
Multiple	0.8	2.4	2.2	1.4
Not Sure	2.2	1.1	1.9	1.1
Infancy Eating Habits at Twelve Months				
Breast Only	17.9	16.7	21.8	18.8
Breast and Formula/Other	19.5	19.4	22.6	15.0
Formula/Other	59.3	60.6	53.3	60.8
Multiple	0.5	0.1	1.2	2.3
Not Sure	2.8	3.2	1.1	3.0

APPENDIX A. COMPARISON OF SURVEY RESULTS

COMPARISON OF SURVEY RESULTS BY YEAR

Table 10.2 below outlines the percentages of responses from the three most recent school year surveys (2018/2019 – 2020/2021). 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

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Survey Participation by School District			
Clark County	72.3	71.7	72.5
Washoe County	16.0	16.4	17.8
Rural Counties	11.6	11.9	9.7
Demographic Information			
Gender of Kindergartener			
Male	50.0	49.4	52.3
Female	50.0	50.6	47.4
Other	0.0	0.0	0.2
Race/Ethnicity of Kindergartener			
African American/Black	7.4	7.0	5.3
Asian/Pacific Islander	6.3	6.2	5.7
Caucasian	35.2	35.1	43.1
Hispanic	31.0	31.1	23.3
Native American/Alaska Native	0.7	1.0	0.7
Other Race	0.6	0.8	0.8
Multiple Races	18.8	18.9	21.1
Single Parent or Guardian	28.5	26.8	24.7
Average # of Children in Household	2.50	2.53	2.50
(Standard Deviation)	(1.20)	(1.21)	(1.45)
Average # of Adults in Household	2.12	2.15	2.14
(Standard Deviation)	(0.91)	(0.92)	(1.09)
Average Age of Mother/Guardian	33.42	33.77	34.99
(Standard Deviation)	(6.86)	(6.84)	(6.47)
Average Age of Father/Guardian	35.88	36.20	37.36
(Standard Deviation)	(7.77)	(7.62)	(8.10)

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Annual Household Income of Survey Respondent			
$0-$14,999	10.6	9.1	9.5
$15,000-$24,999	12.3	10.8	8.8
$25,000-$34,999	13.6	12.8	10.4
$35,000-$44,999	10.4	10.5	8.5
$45,000-$54.999	8.7	8.6	7.9
$55,000-$64,999	6.9	7.2	6.6
$65,000-$74,999	6.0	7.2	7.2
$75,000-$84,999	6.1	6.4	7.2
$85,000-94,999	4.5	5.2	6.2
$95,000 +	20.9	22.2	27.7
Housing Tenure			
Renter-Occupied	55.4	53.8	46.2
Owner-Occupied	44.6	46.2	53.8
Household Smoking			
Someone in household smokes	16.1	15.1	13.1
Smoking allowed in home	1.3	1.1	1.2
Family Events			
Moved to a new home	27.9	22.5	17.5
Job Change	--	21.5	24.8
Divorce or Separation	6.3	5.7	5.9
Loss of job or income	9.6	9.6	28.6
New Child - Birth/Adopt/Foster	11.3	10.4	10.1
Serious Medical issues in the home	4.5	4.4	6.8
Death in the family	8.9	9.2	12.7
Traumatic Event/Disaster/Accident	--	2.1	4.9
Other	3.5	1.9	6.1
Type of School Child Attended in the Past 12 Months			
None/Stayed at Home	27.2	27.6	5.8
Friends/Family Care	4.9	4.8	4.0
Home-Based	6.2	5.6	25.8
School District Pre-School	30.5	30.5	12.5
University Campus Pre School	0.7	1.0	5.1
Head Start	6.8	6.6	2.3
Other Facility/Care	19.6	20.6	28.7
Multiple	4.1	3.3	15.8

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Average Hours of Preschool Attendance			
0 Hours	31.6	30.9	18.1
1-4 Hours	10.4	9.7	3.5
5-10 Hours	15.0	14.7	24.4
11-15 Hours	10.6	10.5	14.1
16-20 Hours	6.9	6.3	12.6
21-30 Hours	9.7	10.0	9.3
31-40 Hours	11.4	13.1	13.1
More than 40 Hours	4.5	4.8	4.9
Reasons Children Did NOT attend preschool*			
No Challenges / Wanted them home	--	47.0	34.5
Too expensive	26.8	27.9	18.7
Too far	4.9	4.5	2.8
Hours not convenient	11.1	11.2	5.9
No open spots	11.6	13.2	7.6
Other	9.1	9.2	8.0
If they could have attended, would they have attended part-time or full time?			
Full Time	55.2	56.1	57.8
Part Time	32.6	31.8	32.3
If they could have attended, what type of facility would you have placed your child in?			
Home-Based	17.3	15.4	12.6
Facility/Center	34.3	36.1	36.6
School District	48.4	48.5	50.9
Amount of Days During The Past Week that Someone Read to Child			
None	3.1	2.6	2.6
1 day	5.0	4.7	5.0
2 days	10.4	9.5	8.1
3 days	15.9	14.3	14.6
4 days	13.5	13.3	12.0
5 days	18.2	19.2	17.7
6 days	6.4	7.5	4.8
7 days	27.4	29.0	35.2

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Health Insurance Status and Access to Health Care			
Applied for insurance for child using Nevada Health Link	13.9	14.0	57.1
Yes child approved. *% only of those who selected yes to applied for insurance using Nevada Health Link*	79.9	83.0	83.1
Health Insurance Type			
Uninsured	6.5	6.5	5.4
Private	48.9	50.9	54.7
Medicaid	30.1	29.4	27.5
Nevada Check-Up	7.0	6.3	5.4
Other	3.4	2.8	2.9
Multiple Types	4.2	4.1	4.1
Race/Ethnicity of Uninsured Kindergartener			
African American/Black	2.5	2.7	2.8
Asian/Pacific Islander	6.5	6.6	5.2
Caucasian	4.6	4.3	4
Hispanic	11.3	10.6	10.9
Native American/Alaska Native	1.9	5.3	7.4
Other Race	3.0	12.4	9.6
Multiple Races	3.9	4.3	2.7
Annual Household Income of Uninsured Kindergarteners			
$0-$14,999	13.6	14.1	14.7
$15,000-$24,999	17.0	13.3	16.9
$25,000-$34,999	17.5	14.8	18.6
$35,000-$44,999	16.3	12.6	11.9
$45,000-$54,999	12.5	11.3	9.4
$55,000-$64,999	7.0	8.1	4.4
$65,000-$74,999	4.9	6.7	6.8
$75,000-$84,999	3.5	4.6	4.7
$85,000-94,999	2.1	4.6	5.9
$95,000 +	5.6	9.9	6.8
Kindergartener Does Not Have a Primary Care Provider	10.9	10.7	8.0

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Types of Barriers Experienced When Trying to Access Healthcare			
Lack of Transportation	3.7	3.2	3.2
Lack of Insurance	6.9	6.2	6.9
Lack of Quality Medical Providers	6.6	5.9	6.5
Lack of Money/Financial Resources	10.1	9.4	10.4
Other Barriers	2.0	1.3	2.1
Knows how to access support services	45.9	44.9	50.2
Difficulties Accessing Mental Health Services for Kindergartener	40.2	40.0	44.1
Routine Care and Health Status of Kindergartener			
Kindergartener Has NOT Had Routine Check-Up In Past Year	10.7	9.4	13.2
Kindergartener Has NOT Visited Dentist in Past Year	22.2	20.7	23.9
Types of Medical Conditions Seen in Kindergarteners			
ADD/ADHD	1.8	1.6	2.3
Allergies	13.3	12.4	14.4
Asthma	5.7	5.1	5.0
Autism	1.3	1.3	2.1
Cancer	0.2	0.1	0.1
Diabetes	0.2	0.2	0.1
Glasses/Contacts	4.5	5.6	4.9
Hearing Aid/Impairment	0.5	0.5	0.5
Heart Condition/Disorder	--	1.0	1.0
Mental Health Condition	0.7	0.6	0.5
Physical Disability	0.3	0.4	0.6
Seizures	0.8	0.7	0.8
Skin Condition	--	3.1	3.6
Speech Delays	--	6.1	6.2
Other Condition	4.5	2.5	3.9
Received a Developmental Screening in past 12 months	31.4	31.3	31.2
Kindergartener's Weight Status			
Underweight	17.2	17.3	19.5
Healthy Weight	51.2	50.3	48.6
Overweight	10.7	11.1	13.2
Obese	20.9	21.3	18.7

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Amount of Days per Week that Child Has at Least 60 Minutes of Physical Activity			
None	1.2	1.2	1.6
1 Day	1.9	1.8	1.7
2 Days	6.4	6.1	7.5
3 Days	11.6	11.8	14.7
4 Days	11.7	12.5	11.5
5 Days	19.6	18.8	18.5
6 Days	8.6	8.7	7.2
7 Days	39.0	39.0	37.4
Number of hours spent in front of a TV or electronic device watching TV, videos, or playing video games - Average Weekday			
None	--	1.0	0.7
Less than 1	--	9.3	5.3
1 Hour	--	26.5	14.2
2 Hours	--	34.3	29.0
3 Hours	--	18.6	7.1
4 Hours	--	5.6	15.0
5 Hours or More	--	4.6	28.6
Number of hours spent in front of a TV or electronic device watching TV, videos, or playing video games - Average Weekend			
None	--	0.6	1.2
Less than 1	--	3.9	5.0
1 Hour	--	12.6	8.7
2 Hours	--	29.8	26.4
3 Hours	--	26.3	25.5
4 Hours	--	16.2	16.1
5 Hours or More	--	10.6	17.2
Number of Times Per Week the Kindergartener Drinks Non-Diet Soda			
None	69.7	69.2	71.6
A Few Times	23.5	23.8	20.9
Once a Day	4.7	5.1	4.0
More Than Once a Day	2.1	1.9	3.5

Table 10.2 Continued

Survey Indicator	2018-2019 (Year 11) (Percent)	2019-2020 (Year 12) (Percent)	2020-2021 (Year 13) (Percent)
Number of Times Per Week the Kindergartener Drinks Diet Soda			
None	89.0	88.8	88.3
A Few Times	8.3	8.7	8.8
Once a Day	2.2	2.1	1.9
More Than Once a Day	0.4	0.5	1.0
Number of Times Per Week the Kindergartener Drinks Juice			
None	12.3	14.4	18.5
A Few Times	41.7	41.2	45.5
Once a Day	28.5	27.8	22.9
More Than Once a Day	17.5	16.6	13.1
Infancy Eating Habits at One Month			
Breast Only	50.5	51.4	53.1
Breast and Formula/Other	--	25.8	26.0
Formula/Other	--	19.9	18.3
Multiple	--	1.4	0.4
Not Sure	1.3	1.5	2.3
Infancy Eating Habits at Three Months			
Breast Only	38.3	39.3	42.6
Breast and Formula/Other	--	25.9	25.8
Formula/Other	--	32.2	29.2
Multiple	--	1.3	0.5
Not Sure	1.4	1.4	2.0
Infancy Eating Habits at Six Months			
Breast Only	25.3	25.8	28.8
Breast and Formula/Other	--	21.5	23.3
Formula/Other	--	49.4	45.0
Multiple	--	2.0	0.8
Not Sure	1.9	1.4	2.2
Infancy Eating Habits at Twelve Months			
Breast Only	13.9	17.6	17.9
Breast and Formula/Other	--	17.0	19.5
Formula/Other	--	62.1	59.3
Multiple	--	1.4	0.5
Not Sure	2.0	1.8	2.8

APPENDIX B. SURVEY INSTRUMENT

UNLV

Kindergarten Health Survey

DEAR PARENT OR GUARDIAN: *This survey has been designed by the Nevada Institute for Children's Research and Policy at the University of Nevada Las Vegas, in partnership with the State of Nevada Department of Health and Human Services, and the local county school districts. The information from this survey will be used to help understand the health of children entering kindergarten this year. You have been asked to participate because you have a child entering kindergarten.* ***Your responses to this survey will be confidential.*** *All information from this survey will be used to discuss children's health on a group level, not on an individual level.*

Name of elementary school: _____

Your HOME zip code: _____

Do you ☐ Rent your home or ☐ Own your home

Are you a single parent/guardian? ☐ Yes ☐ No

Total # of children(0-17) in your household: _____
Total # of adults in your household (18+): _____

Age of child's mother/guardian: _____
Age of child's father/guardian: _____

Annual household Income: (check one)
☐ $0 -$14,999
☐ $15,000 -$24,999
☐$25,000 -$34,999
☐ $35,000 -$44,999
☐ $45,000 -$54,999
☐ $55,000 -$64,999
☐ $65,000 -$74,999
☐ $75,000 -$84,999
☐ $85,000 -$94,999
☐ $95,000 +

Does anyone in your household smoke? ☐ Yes ☐ No
Is smoking allowed in your house? ☐ Yes ☐ No

Have you experienced any of the following events in the last 12 months? (check all that apply)
☐ Change in job ☐ Moved -new home/city/country
☐ Divorce or separation ☐ New Child—Birth/Adopt/Foster
☐ Death in the family ☐ Serious medical issues in the home
☐ Loss of a job or income ☐ Traumatic Event/Disaster/Accident
☐ Other major event (specify): _____
☐ NONE

Please answer the following questions for the child that will be enrolled in kindergarten this year.

1. Child's age: _____
2. Child's gender: ☐ Male ☐ Female ☐ Other
3. Child's weight: _____ pounds
4. Child's height: _____ ft. _____ in. (12in = 1ft)
5. Child's race / ethnicity:
   ☐ African American/Black ☐ Hispanic / Latino
   ☐ Asian / Pacific Islander ☐ Native American / Alaska Native
   ☐ Caucasian/White ☐ Other (please specify): _____
6. Please select the type of medical insurance your child currently has: (Check all that apply)
   ☐ Medicaid ☐ Private (Employer/Union)
   ☐ Nevada Check-Up ☐ Other_____
   ☐ NONE/Uninsured
7. Have you or someone else:
   Applied for Medicaid or other health plan for **your child** through the Silver State Exchange/NV Health Link? ☐Yes ☐No ☐Not Sure
   If yes, was your child approved? ☐Yes ☐No ☐Not Sure
8. Does your child have a primary care provider (regular doctor, nurse practitioner, or physician's assistant)? ☐Yes ☐No
9. In the *past 12 months* has your child visited a:
   Medical provider for a routine check-up (not an illness)? ... ☐Yes ☐No
   Dentist? ..... ☐Yes ☐No
10. Please select any medical conditions listed below that your child has: (**Check all that apply**)
    ☐ ADD / ADHD ☐Heart Condition/Disorder
    ☐ Allergies ☐Mental Health Condition
    ☐ Asthma ☐Physical Disability
    ☐ Autism ☐ Seizures
    ☐ Cancer ☐ Skin Condition
    ☐ Diabetes ☐ Speech Delays
    ☐Hearing Aid/Impairment ☐ Vision Impairment /Glasses / Contacts
    ☐Other (specify) _____ ☐ NONE
11. Please check which one best describes what your child drank ***at each time point***:

	Breast Only	Breast & Formula/Other	Formula/ Other	Not Sure
1 Month (check one)	☐	☐	☐	☐
3 Months (check one)	☐	☐	☐	☐
6 Months (check one)	☐	☐	☐	☐
12 Months (check one)	☐	☐	☐	☐

List barriers to breastfeeding: _____

12. Has your child had a developmental screening (like the Ages and Stages Questionnaire) in the past 12 months?
    ☐ Yes ☐No ☐Not sure
13. Do you know where or how to access support services and programs in your community to meet your child's/ family's needs? (e.g.food/bills, parent classes, support groups, etc.)
    ☐Yes ☐Somewhat ☐ No
14. Please select any barriers you have experienced when accessing health care for your child: (check all that apply)
    ☐ Lack of transportation ☐ Lack of insurance
    ☐ Lack of good medical providers ☐ Lack of money
    ☐ Other (specify): _____
    ☐ NONE
15. Have you ever tried to get mental or behavioral health services for your child? ☐ Yes ☐ No
    If yes, have you had trouble getting services?
    ☐ No ☐ Yes (explain) _____
16. In general, how many days a week does your child do at least 60 minutes of physical activity? (circle one)
    0 1 2 3 4 5 6 7
    List barriers: _____
17. On an ***average weekday***, about how many hours does this child usually spend 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)
    None Less than one 1 2 3 4 5 +
18. 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 video games) watching TV, videos, or playing video games? (circle one)
    None Less than one 1 2 3 4 5 +
19. **During the past 7 days**, how many times did your child drink a can, bottle, or glass of...

	None	A few times	Once a Day	More than Once a Day
Non-diet soda or pop (check one)	☐	☐	☐	☐
Diet soda or pop (check one)	☐	☐	☐	☐
Fruit Juice (check one)	☐	☐	☐	☐

20. **During the past 7 days,** how many days did you or someone in your family/ house read to your child? (circle one)
    0 1 2 3 4 5 6 7
21. What type of pre-school did your child attend most often in the *past 12 months*? (check one)
    ☐ Friends/Family/Neighbor care ☐Home-based
    ☐ School District/Charter Pre-school ☐University/College Campus Pre-school
    ☐ Head Start ☐Other Facility/Center
    ☐ NONE / Stayed home
22. ***On average,*** how many hours per week did your child attend preschool?
    ☐Zero ☐ 1-4 ☐ 5-10 ☐11-15 ☐16-20 ☐21-30 ☐31-40 ☐ 41+
23. If your child did not attend preschool **OR** if they did not attend the school you preferred, hours preferred, ect, what were some of the reasons? (check all that apply):
    ☐ Too expensive ☐Location too far ☐ Hours not convenient ☐ No open spots
    ☐ Other _____
    ☐None (No challenges or I wanted to keep them home)
24. What preschool options would have or did best fit your needs?
    1) (check one) ☐full time ☐ part-time ☐ No Preschool
    2) (check one) ☐ home based ☐ facility/center based ☐ School District

PLEASE RETURN THIS SURVEY TO YOUR CHILD'S TEACHER BY OCTOBER 23, 2020

Thank you for your participation.
TEACHERS: Please return the survey to your school's front office, or mail to:
NICRP, Kindergarten Health Survey, 4700 Maryland Parkway, Box 453064, Las Vegas, NV 89119
For Questions/Concerns Contact: Amanda Haboush-Deloye 702-895-1040 Amanda.Haboush@unlv.edu

UNLV

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 colaboración con el Centro de Salud del Sur de Nevada y los Distritos Escolares del Condado local. La información adquirida de esta encuesta se utilizará para ayudar a comprender la salud de los niños que comienzan la escuela preescolar este año. Se le ha pedido 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 grupo, no individual.*

Nombre de la escuela primaria: _____
Código postal de su CASA: _____

¿Usted? ☐ Renta su casa o es ☐ Propietario de su casa

Es usted padre/tutor soltero? ☐ Sí ☐ No

Total de **niños(as)** (0-17) viviendo en su casa: _____

Total de **adultos** (18+) viviendo en su casa: _____

Edad de la madre/tutor del niño: _____

Edad del padre/tutor del niño: _____

Ingreso anual del hogar (seleccione uno)
☐ $0 -$14,999
☐ $15,000 -$24,999
☐ $25,000 -$34,999
☐$35,000 -$44,999
☐ $45,000 -$54,999
☐ $55,000 -$64,999
☐ $65,000 -$74,999
☐ $75,000 -$84,999
☐$85,000 -$94,999
☐ $95,000 +

¿Alguien en su hogar fuma? ☐ Sí ☐ No

Está permitido fumar en su casa? ☐ Sí ☐ No

Ha experimentado cualquiera de los siguientes eventos en los últimos 12 meses? (seleccione todas las que apliquen)
☐Cambio en el trabajo
☐Divorcio o separación
☐Muerte en la familia
☐Pérdida de un trabajo o ingresos
☐ Se mudó-nuevo hogar/ciudad/país
☐ Nuevo niño/a—Nacimiento/Adopción / Acogimiento temporal
☐Graves problemas médicos en el hogar
☐Evento traumático / desastre / accidente
☐Otro evento importante (especifique) : _____
☐NINGUNO

Por favor conteste las siguentes preguntas sobre el niño(a) que será inscrito en el kínder este año.

1. Edad del niño(a): _____
2. Sexo del niño(a): ☐ Masculino ☐ Femenino ☐ Otro
3. Peso del niño(a) : _____ libres
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 médico que su niño(a) tiene actualmente. (seleccione todas las que apliquen)
☐ Medicaid ☐ Privado (Empleador/Union)
☐ Nevada Check-Up ☐ Otro _____
☐ 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? ☐Sí ☐No ☐No se
En caso que sí, ¿fue su niño approvado? ☐Sí ☐No ☐No se
8. ¿Su niño(a) tiene un proveedor médico primario (doctor regular, enfermera o asistente médico)? ☐ Sí ☐ No
9. En *los últimos 12 meses* su niño(a) ha visto a un:
Proveedor médico para un chequeo de rutina (no para una enfermedad) ..... ☐ Sí ☐No
Visto a un dentista ..... ☐ Sí ☐No
10. Por favor, seleccione todas las condiciones médicas que tenga su niño(a):
☐ ADD/ADHD
☐ Alergias
☐ Asma
☐ Autismo
☐ Cáncer
☐ Diabetes
☐ Oído/Discapacidad Auditiva
☐ Condición del corazón
☐ Condición de Salud Mental
☐ Discapacidad física
☐ Convulsiones
☐ Condición de la piel
☐ Retrasos en el habla
☐ Debilitación de la vision/ Lentes/ de Contacto
☐ Otro (especifique) _____ ☐ NINGUNO
11. Por favor, seleccione que mejor describe lo que bebió su niño(a) **en cada etapa:**

	Sólo Pecho	Pecho y Fórmula/Otro	Fórmula/ Otro	No Se
Un Mes (elige uno)	☐	☐	☐	☐
3 Meses (elige uno)	☐	☐	☐	☐
6 Meses (elige uno)	☐	☐	☐	☐
12 Meses (elige uno)	☐	☐	☐	☐

Lista de barreras al amamantar: _____

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
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.) ☐ Sí ☐ Un Poco ☐ No
14. ¿Se ha enfrentado con obstáculos en el acceso de salud para su niño (a)? (seleccione todas las que apliquen)
☐ Falta de transportación ☐ Falta de aseguranza
☐ Falta de proveedores médicos de calidad ☐ Falta de dinero
☐ Otro (especifique):_____
☐ NINGUNO
15. ¿Alguna vez ha tratado de obtener servicio de salud mental o de comportamiento para su niño(a)? ☐ Sí ☐ No
En caso que sí, ¿ha tenido problemas para obtener los servicios? ☐ No ☐ Sí (espicifique) _____
16. ¿En general, ¿Cuantes días a la semana su niño(a) hace por lo menos 60 minutos de actividad física? (circulé uno)
0 1 2 3 4 5 6 7
Lista barreras:_____
17. ¿En un día de la semana normal, ¿cuántas horas suele pasar su niño frente a un televisor o dispositivo electrónico (por ejemplo, computadoras, teléfonos celulares, videojuegos portátiles) viendo televisión, videos o jugando videojuegos? (circulé uno)
Ninguna Menos de una 1 2 3 4 5 +
18. ¿En un fin de semana normal, ¿cuántas horas suele pasar su niño frente a un televisor o dispositivo electrónico (por ejemplo, computadoras, teléfonos celulares, videojuegos portátiles) viendo televisión, videos o jugando videojuegos? (circulé uno)
Ninguna Menos de una 1 2 3 4 5 +
19. **Durante los últimos 7 días,** cuántas veces bebió su niño(a) una botella o vaso de…

	Ninguno	Algunas veces	Una vez al día	Más de una vez al día
¿Soda regular o pop? (elige uno)	☐	☐	☐	☐
¿Soda de dieta o pop?(eligeuno)	☐	☐	☐	☐
¿Jugo de fruta?(eligeuno)	☐	☐	☐	☐

20. **Durante los últimos 7 días,** cuántas días usted o alguien en su familia/casa le leyó a su niño/a? (circulé uno)
0 1 2 3 4 5 6 7
21. ¿A que tipo de escuela preescolar atendio su niño(a) mas a menudo en *los ultimos12 meses*? (seleccione uno)
☐ Al cuidado de Amigo/Familiar/Vecino
☐ Preescolar del Distrito Escolar
☐ Head Start
☐ Ninguna/Permaneció en la Casa
☐ Preescolar Basada en Casa
☐ Preescolar de al Universidad
☐ Otro Centro
22. ¿**En promedio**, cuántas horas por semana asistió su niño(a) al preescolar?
☐ Cero ☐ 1-4 ☐ 5-10 ☐11-15 ☐16-20 ☐ 21-30 ☐31-40 ☐ 41+
23. Si su niño(a) no asistió el preescolar, o si no asistió el preescolar su preferido, horas preferido, etc, ¿cuáles fueron algunas de las razones? (seleccione todas las que apliquen) :
☐ Demasiado caro ☐ Localización demasiado lejos ☐ Horas no convenientes
☐ No hay espacios abiertos ☐ Otro _____
☐ Ninguno, sin retos o quería mantenerlo(a) en casa
24. ¿Cuál optiones que más preferiría or que más prefiere ?
1) (seleccione uno) ☐ tiempo completo ☐ tiempo parcial
2) (seleccione uno) ☐ en casa ☐ en un centro ☐ Districto escolar

POR FAVOR DEVUELVA ESTE CUESTIONARIO AL MAESTRO(A) DE SU NIÑO(A) ANTES DEL VIERNES, OCTUBRE 23, 2020
Gracias por su participación.
TEACHERS: Please return the survey to your school's front office, or mail to: **NICRP, Kindergarten Health Survey,** 4700 Maryland Pkwy, 453064, Las Vegas, NV 89119
¿Preguntas? Contactar a: Amanda Haboush-Deloye 702-895-1040 Amanda.Haboush@unlv.edu

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