



# **Health Status of Children Entering Kindergarten: Results of the 2008-2009 Nevada Kindergarten Health Survey**

**February 2009**

**This project was completed in collaboration with the following:  
Clark County School District  
Southern Nevada Health District  
Nevada State Health Division  
and  
Nevada School District Superintendents**

**Nevada Institute For Children's Research & Policy**

# **NICRP**

**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

**HEALTH SCIENCES**  
School of Community Health Sciences

**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 didn't want to stop there. She wanted to transform that research into meaningful legislation that would make a real difference in the lives of our children.

**NICRP's Mission:** The Nevada Institute for Children's Research and Policy (NICRP) looks out for Nevada's children. 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 NIDRP research and services, please visit our website at: <http://www.nic.unlv.edu>

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## INTRODUCTION

Academic achievement for children is vital to their success in life. Those that do well in school have greater opportunities for post secondary education, and later have better prospects for employment. One of the major factors that can affect a child's academic achievement is his or her health status. Academic outcomes and health conditions are consistently linked in the literature (Taras & Potts-Datema, 2005). Children with poor health status and especially those with common chronic health conditions have increased numbers of school absences, and more academic deficiencies (Taras & Potts-Datema, 2005). Children who miss more than ten days per semester have difficulty staying on grade level, and absenteeism due to chronic illness relates to even lower school achievement than the general high absence population (Klerman, 1988). Therefore to increase the likelihood for academic success in children we need address their health concerns. For this reason preventative care is crucial to a child's ability to succeed in school.

According To the most recent KIDS COUNT data from the Annie E Casey Foundation, 11% of Nevada's teens are high school dropouts, compared to 7% nationally. The national dropout prevention center lists poor attendance and low achievement as two of the significant risk factors for school dropout (Hammond et.al., 2007). Additionally studies examining school drop out indicate that early intervention is necessary to prevent students from dropping out of school. Middle and high school students that drop out likely stopped being engaged in school much earlier in their academic career. Therefore, early prevention and intervention is crucial to improving graduation rates. Ensuring that children have their basic needs met, including receiving adequate health care, can directly impact a child's academic achievement as well as increase their likelihood for high school graduation.

To gain baseline information on the health status of children entering the school system and better track student health status, the Nevada Institute for Children's Research and Policy (NICRP), in partnership with the state's 17 school districts, the Southern Nevada Health District (SNHD), and the Nevada State Health Division, conducted a health survey examining the health status as well health insurance status of Nevada's children entering kindergarten. This study was conducted with the goal of quantifying the health status of children as they enter school to be able to identify specific areas for improvement to eventually increase academic success among Nevada's students.

## **METHODOLOGY**

In the fall of 2008, NICRP partnered with the Clark County School District (CCSD) and the SNHD to create a health survey designed for parents of children entering kindergarten. The survey was intended to provide a general understanding of the overall health status of children when they enter school. The short questionnaire was developed in both English and Spanish and contained 22 questions. During the development of the project, the Nevada State Health Division presented the opportunity to participate in the survey to officials in the other school districts in Nevada. The superintendents of all 17 school districts in the state agreed to participate in the study. Questionnaires were distributed to kindergarten teachers in all public elementary schools in the state. Teachers then distributed the surveys to parents during the first part of the school year. Parents who chose to participate then turned the survey into either the school office or their child's teacher. The surveys were then returned to NICRP via mail. In Clark County, teachers sent the surveys to the CCSD Office of Research via school mail where NICRP staff picked them up. Each survey was then assigned a unique ID number by NICRP staff so that each survey could be tracked. All information was entered into the statistical analysis software SPSS 15.0. The surveys completed in Spanish were entered into the English database by a bilingual staff member at NICRP. No identifying information was included on any of the surveys.

Each school district provided the total number of kindergarten students enrolling that fall. For the entire state it was estimated that there were 30,744 kindergarteners enrolled in the fall of 2008. At the end of the data collection period 11,073 surveys were received and entered resulting in a 36% response rate for the state. Response rates were also calculated for each of the school districts individually. These ranged from 0% in Lyon and Lander to 100% participation in Eureka. In Clark County the response rate was 37.4%, in Washoe County 22.7% and the total response rate for all other counties was 43.9%. Washoe County may have had a lower response rate because of a delay in getting the surveys distributed to parents in that district.

## **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-report data from parents. This information relies on the memory and honesty of the participants in the survey. Additionally, several of the questions were left blank on the surveys received. NICRP kept all surveys in the database for analysis, but it is important to note when reading percentages presented in tables that not all respondents answered all questions. Some tables may have a total of 11,073 (all participants responded to the question) while others may have a lesser number of total cases because several people left the question blank. In the graphs presented in this report all percentages are calculated based on the total number of people answering the question – not the total number of people who completed a survey.

## RESULTS

Presented in the tables below are the basic frequencies (counts and percentages) for all questions asked in the survey. This information provides excellent baseline health data for school aged children in Nevada. In addition, cross tabulations were calculated for selected variables to provide additional information on specific topics. A chi square statistic was also calculated to test for the statistical significance of the differences provided in the cross tabulation tables. Percentage calculations as well as statistical significance are presented with the appropriate graphs.

### DEMOGRAPHICS

The surveys were created to be one page in length so that one side was written in English and the other side in Spanish. Of the 11,073 completed surveys, the majority of parents (79.54%) completed the survey in English while 20.46% completed it in Spanish.

Figures 1.1 and 1.2 illustrate parent participation by school district. The first pie chart illustrates the divisions between Washoe, Clark and all other counties. Because Clark County is the largest school district the state, it was expected that Clark County parents comprise the vast majority of the respondents for this survey. Figure 1.2 illustrates the county specific participation for all rural counties, which represent 12.4% (n=1,368) of the total sample.

Figure 1.1

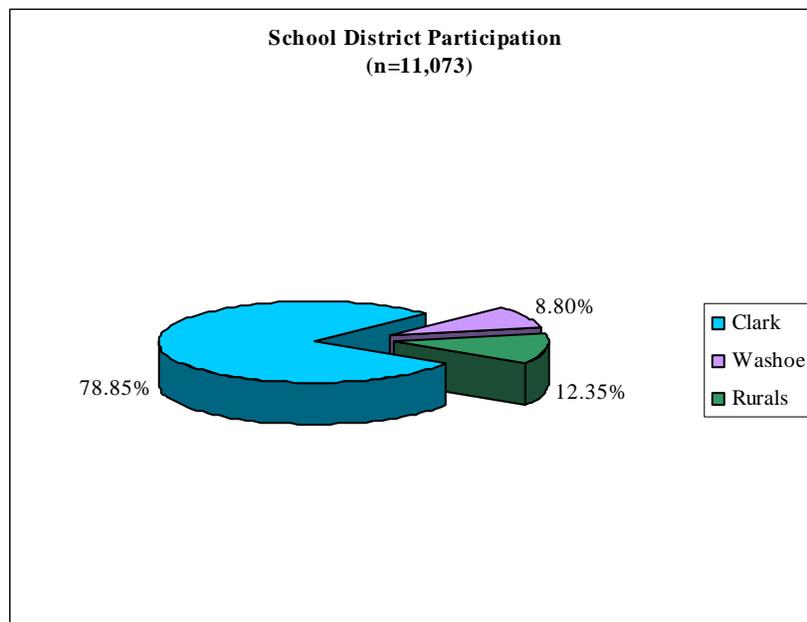
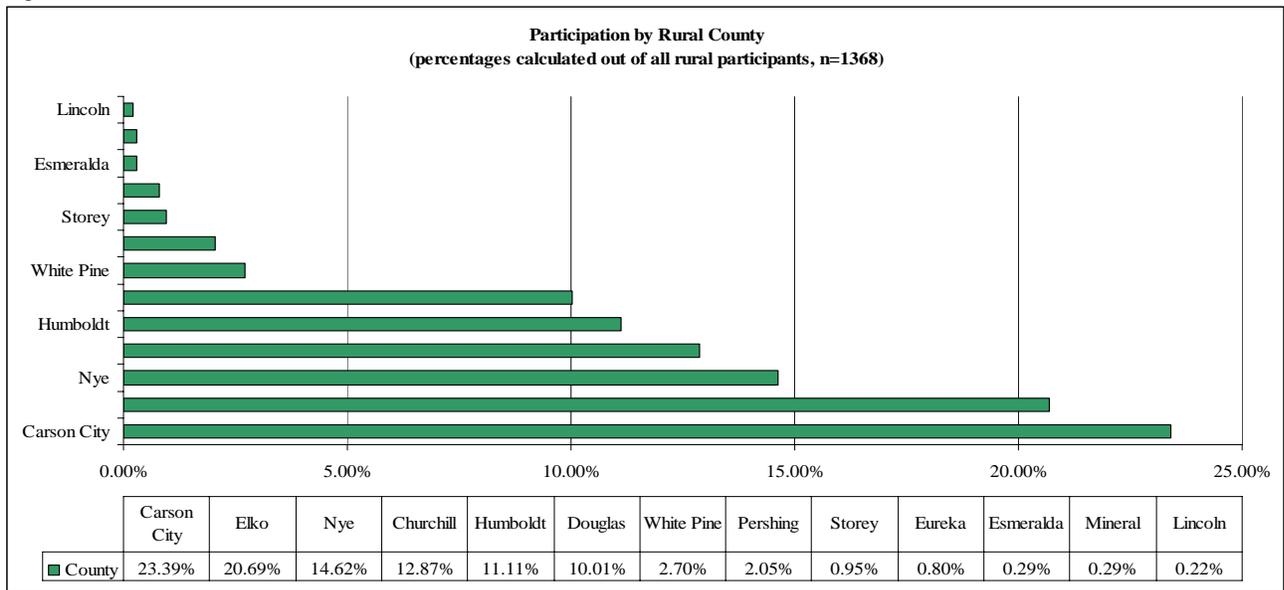


Figure 1.2

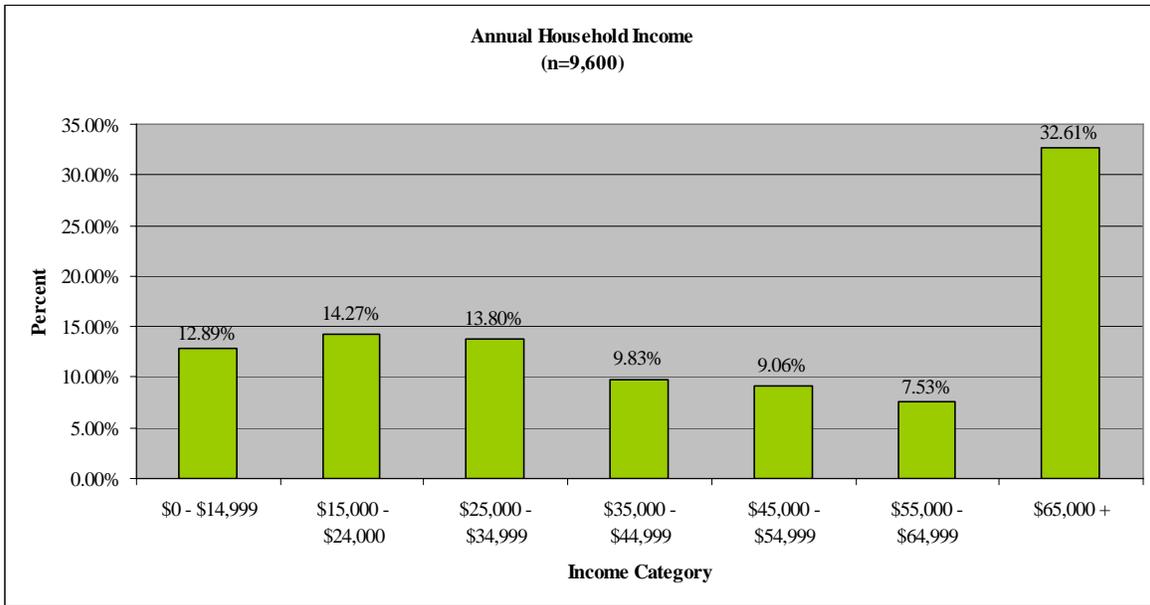


Additionally, information on the gender of the kindergarten student was recorded. The distribution was almost exactly split with 50.22% male and 49.78% female. These percentages represent only the 8,526 participants that answered this question (2,547 respondents (23%) left this question blank).

Parents were also asked to respond to questions regarding their annual household income, the child’s race/ethnicity, and the child’s insurance status and type of insurance, if applicable. Below the title of each of the figures is the total ‘n’ or number of people that answered that question on the survey. All percentages are taken out of the total number of people that answered the question, not the total number of people who returned a survey. Figures 1.3 through 1.5 represent the demographic data.

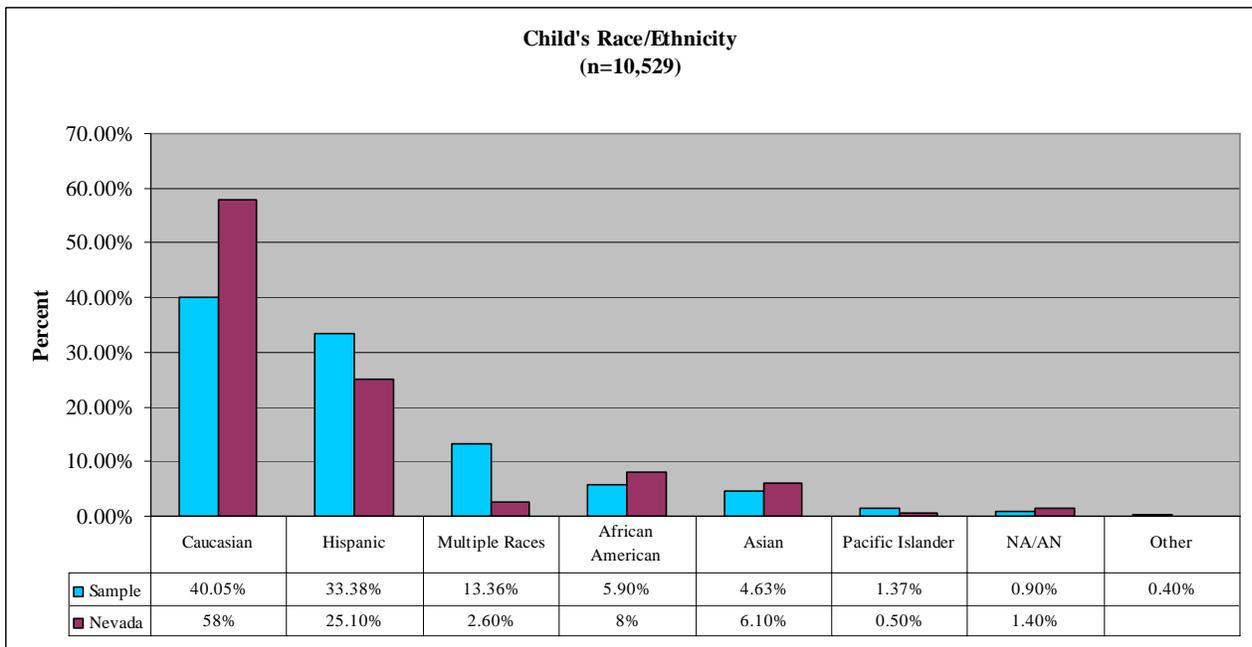
Figure 1.3 illustrates the income distribution among parents participating in the survey. According the US Census Bureau, the average median household income from 2004 to 2006 in Nevada was \$50,819.00. The median represents the middle number in a distribution, and is the best measure of central tendency to reduce the impact of outliers (those with very high or very low incomes) in the distribution. The sample of participating parents has a similar distribution as illustrated in the figure below. 50.8% of all participants reported income below \$45,000, while 49.2% reported incomes at \$45,000 or higher

Figure 1.3



The sample for this survey is representative of the state of Nevada in terms of race and ethnicity for most categories. Figure 1.4 displays the race/ethnicity of the respondents to this survey compared to the race/ethnicity of the state of Nevada according 2007 estimates from the US Census.

Figure 1.4



\*NA/AN = Native American/Alaska Native  
 \*\*Nevada state data from <http://quickfacts.census.gov>

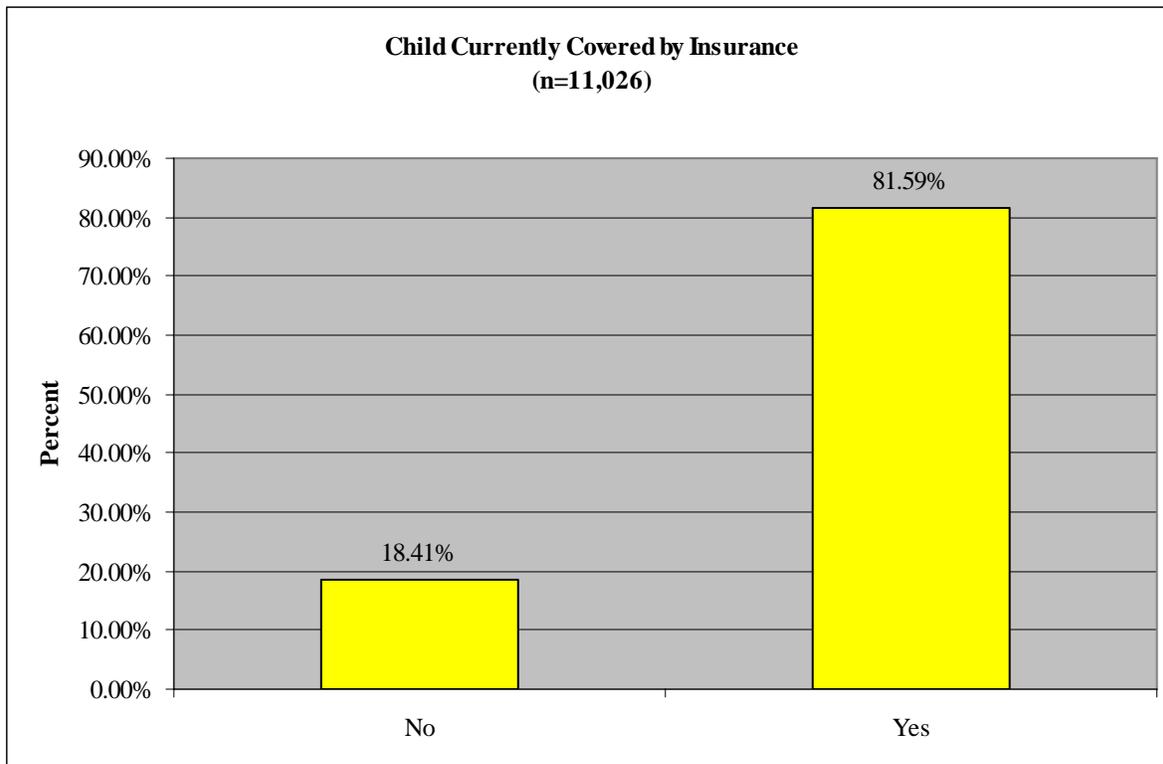
## INSURANCE STATUS

Many children in Nevada and across the country are uninsured. According to the latest Census data, approximately 8.1 million children under the age of 18 are uninsured (DeNavas-Walt et al. 2008). The most recent data ranks Nevada fifth in the country for the number of children without health insurance, at 15.8 percent of children (Families USA, 2008).

Children's health insurance status is correlated among states with the highest levels of with children's access to health care services. Research indicates that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes than insured children. For example, uninsured children were nearly ten times as likely as insured children to have an unmet health need (Covering Kids and Families, 2005). Nevada is ranked the second highest among uninsured children not receiving any care at 43.4 percent of children (Covering Kids and Families, 2005).

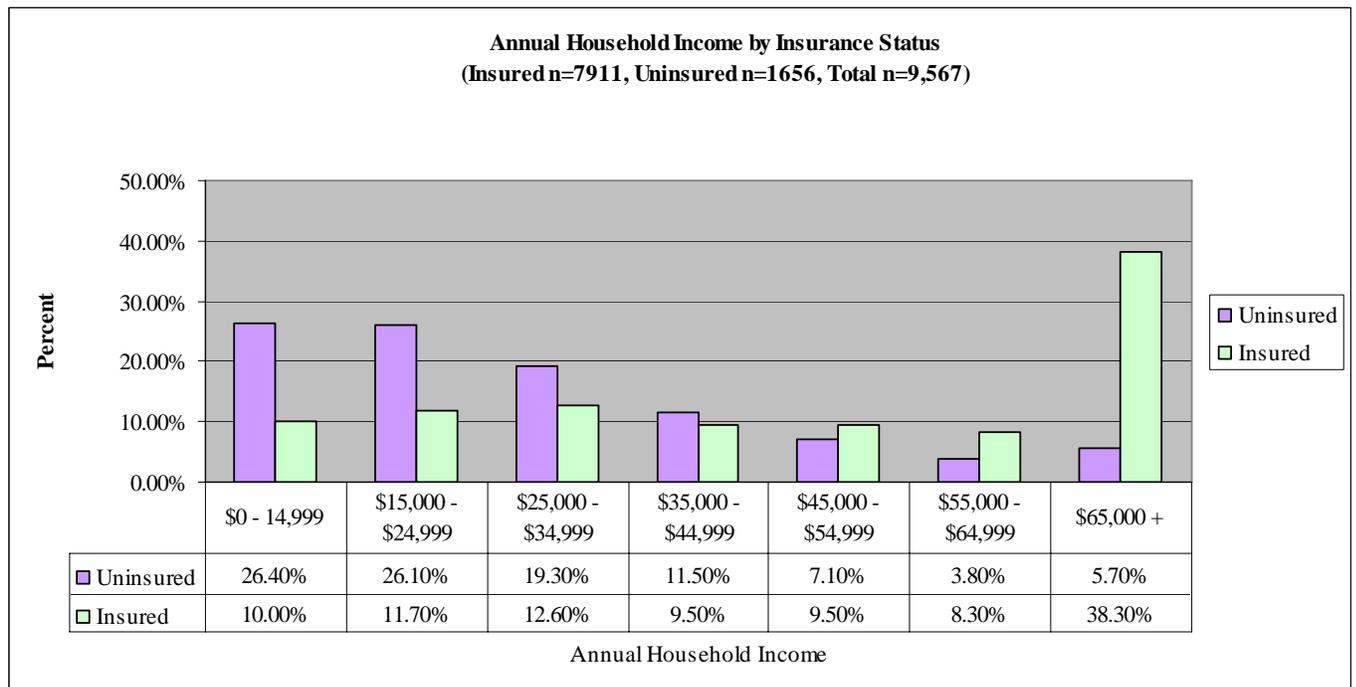
Participants in the current study were asked whether or not their child had insurance. Approximately eighty-one percent of parents surveyed indicated that their children had some type of health insurance coverage. Slightly more than 18 percent of participants stated their child had no health insurance coverage.

Figure 2.1



Not surprisingly, Figure 2.2 illustrates that children from lower income families are more likely to be uninsured. At the lower end almost three times as many children whose parents make less than \$15,000 per year are uninsured while there are almost eight times as many children whose parents are making \$65,000 or more that have insurance. These differences are statistically significant at  $p=.000$ . This correlation between income and insurance status reflects both the lack of access and affordability of private health insurance coverage options for lower and middle income families. A recent Kaiser Family Foundation (2009) study found that of those lower and middle income families that had access to private health insurance coverage, only 19 percent could afford the premiums.

Figure 2.2

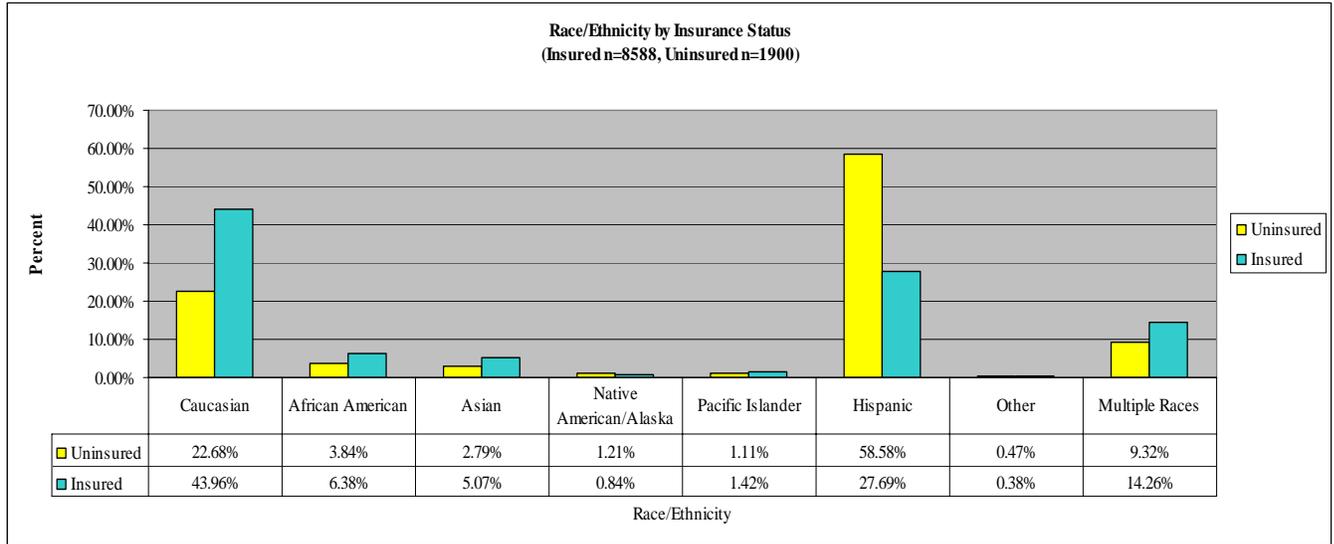


\*These findings are significant at  $p=.000$

\*\*Percentages are calculated out of the number within each insurance category

In examining the relationship between race/ethnicity and insurance status (as shown in Figure 1.7) we can see that most children who are uninsured are Hispanic (58.58%), followed by Caucasian at 22.868% of all uninsured children in this study. Differences in these categories are statistically significant at  $p=.000$ . Research indicates that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Covering Kids and Families, 2005). In Nevada and other states with a relatively large percentage of Hispanic immigrants, the rates of uninsured children are higher. Many uninsured Hispanic children coming from these immigrant families are eligible for public insurance coverage, yet enrollment and access barriers continue to block these children from obtaining public coverage.

Figure 2.3

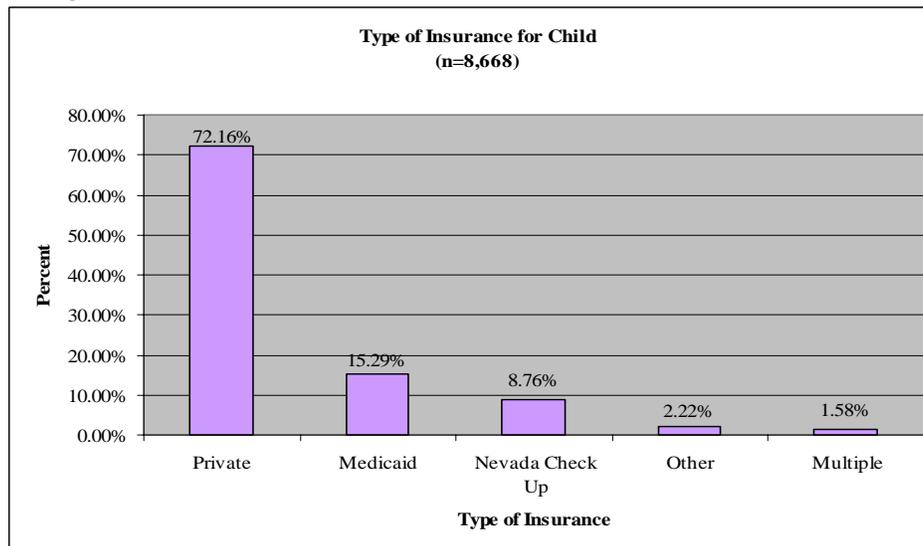


\*These findings are statistically significant at p=.000

\*\*Percentages are calculated out of the number within each insurance category

Parents were also asked to indicate the type of insurance their child had. A majority of parents responded that their children (55.58%) had private health insurance coverage, while 24% of children had public health insurance coverage. Of those children with public coverage, 15.17% were covered by Medicaid and 8.75% were covered by Nevada Check-up. This data mirrors national trends in children’s health insurance coverage, although there are some slight differences that must be noted. A recent study by the Kaiser Family Foundation (2009) found that more than 25 percent of children in the United States are covered by public health insurance. This study indicates that only 23.92% of children entering kindergarten are covered by public health insurance. This percentage may be reflective of the greater barriers to enrollment in Nevada’s public health insurance programs.

Figure 2.4



Just over two percent of respondents indicated that they had some “other” type of insurance, but did not fill in the space left to specify that type of insurance. In addition there were 1.5% respondents that selected multiple types of insurance for their children, these respondents were categorized in the “multiple” category. The majority of these responses specified that their child had either two forms of private insurance or Medicaid as well as some private insurance carrier.

**ROUTINE CARE**

Access to routine medical care services is a major factor contributing to children’s health status. Routine care includes basic health care services such as immunizations, vision screening and child well visits. Having access to routine medical check ups is one key indicator that contributes to children’s health and well-being. Children without health insurance are more likely to miss out on routine care than insured children. Children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Shi, et. al., 1999).

Survey results indicate approximately 83% of children had at least one routine check-up in the past twelve-months from the date of the survey and 86.52 % of children had at least one routine check-up once a year since birth. This may seem counterintuitive as you would expect that if a child has been in for a check up at least once a year since birth then he or she would have been in for a check up in the past 12 months. However, the frequencies indicate the opposite. Data were cleaned for entry errors, therefore this inconsistency may have been due to a parent misunderstanding of the questions. This should be corrected in future iterations of the survey.

Figure 3.1

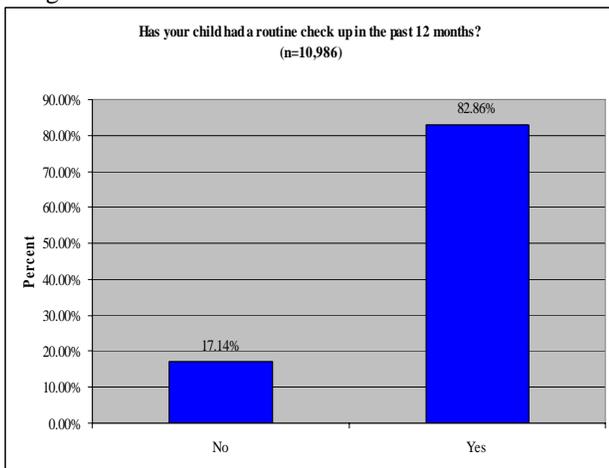
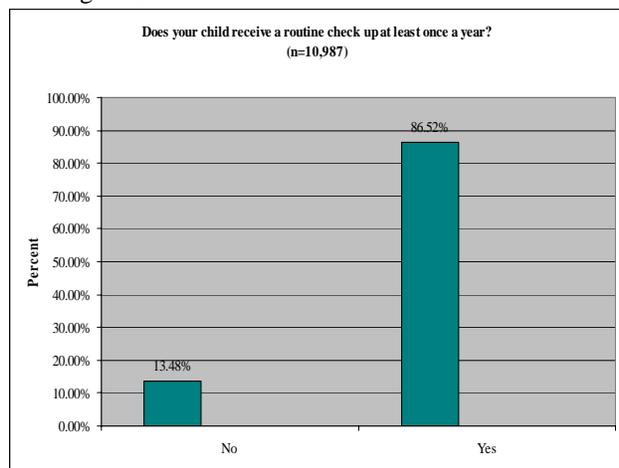


Figure 3.2



Having access to regular primary care services or a medical home is another key indicator of children’s overall health status. Primary care providers, which include physicians and nurses in general practice, offer routine personalized medical care to children. They provide a medical home where children can get basic care services such as annual check-ups. Children that have access to a regular primary care provider in charge of coordinating and organizing their care tend to have a better health status than children without access to a primary care provider. According

results of the current study, 79.12% of participants reported that they had a primary care provider. Almost 21% had no primary care provider.

Figure 3.3

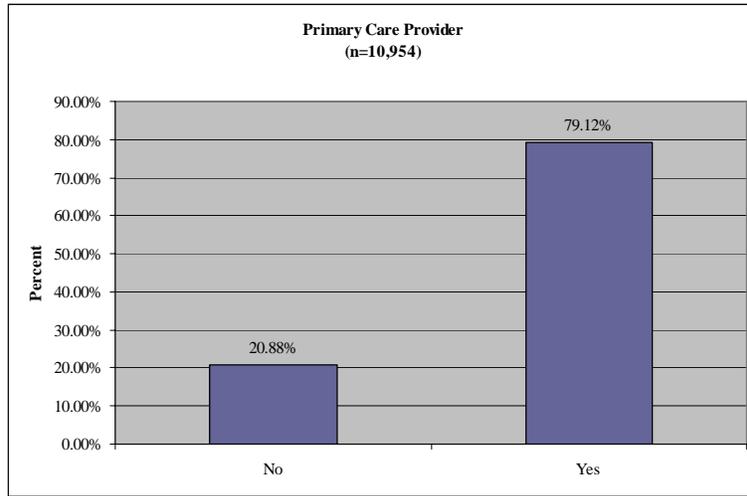
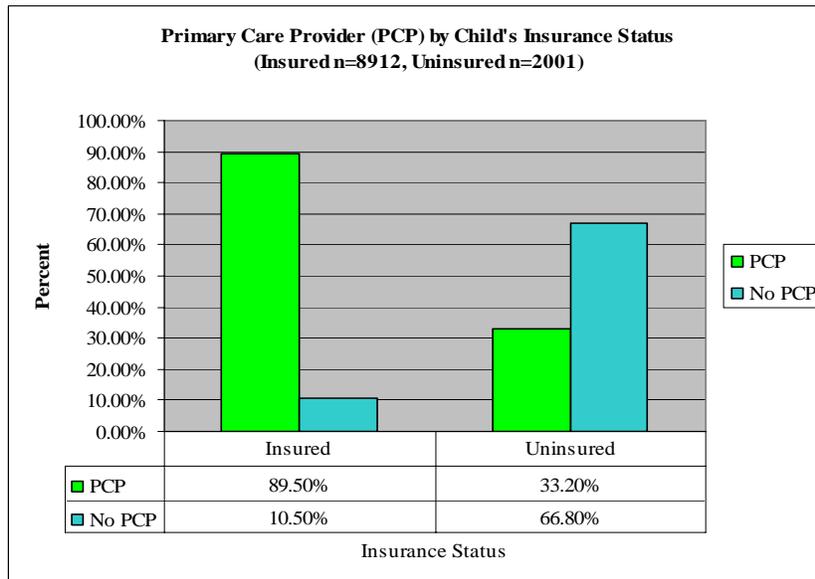


Figure 3.4 provides further information regarding insurance status and primary care providers. Almost 90% of those children with insurance reported that they had a primary care provider (PCP), while only one third of those without insurance reported that they had a primary care provider. This difference is statistically significant at  $p=.000$ . Since most PCP belong to a private practice, uninsured children are much less likely to have access to a PCP. This is partially attributable to the disparities in health status between insured and uninsured children.

Figure 3.4

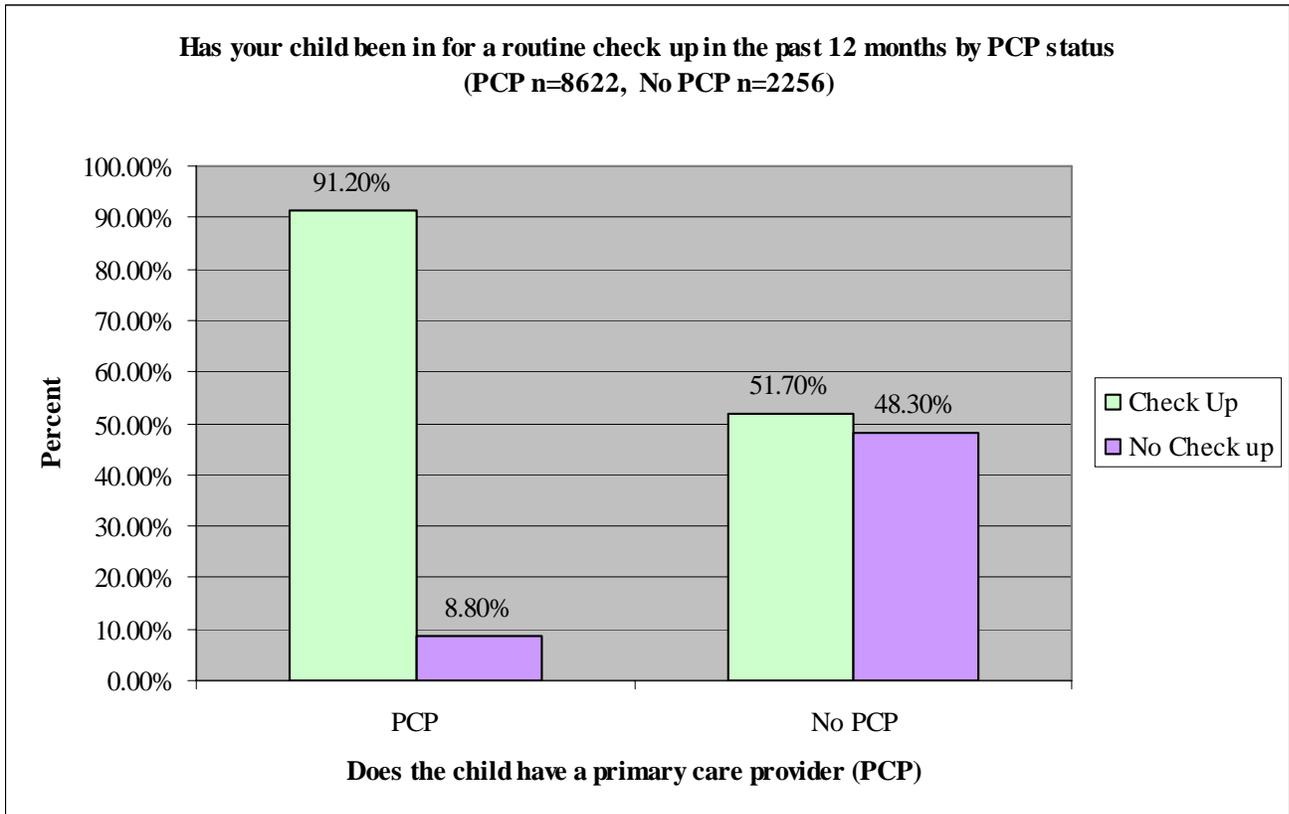


\*These findings are statistically significant at  $p=.000$

\*\*Percentages are calculated out of the number within each insurance category

For example, Figure 3.5 shows the proportion of children within each category (those children without a PCP, and those that have a PCP) and whether they have received a routine check up in the past twelve months. Of the children that have a primary care provider (PCP) only 8.8% have not had a routine check up in the last year. For those children without a PCP, almost half (48.3%) had not had a routine check up in the last year. These differences are statistically significant at  $p=.000$ .

Figure 3.5



\*These findings are statistically significant at  $p=.000$

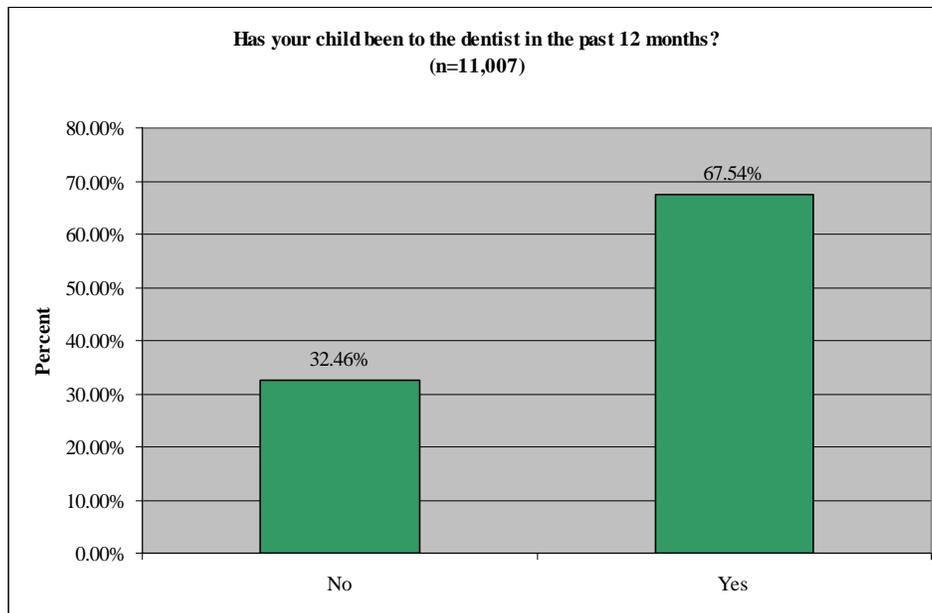
\*\*Percentages are calculated out of the number within each PCP category

## 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. These children also miss more days of school than children without dental problems. Research indicates that uninsured children are much more likely to have unmet dental needs. One study found that uninsured children were up to four times more likely than insured children to have an unmet dental need (Brown et al, 2004).

To prevent oral health problems in children, it is generally recommended that they receive regular dental check-ups every six months to a year. Roughly 32.5 % of survey respondents indicated that their children had not seen a dentist in the last twelve months.

Figure 4.1

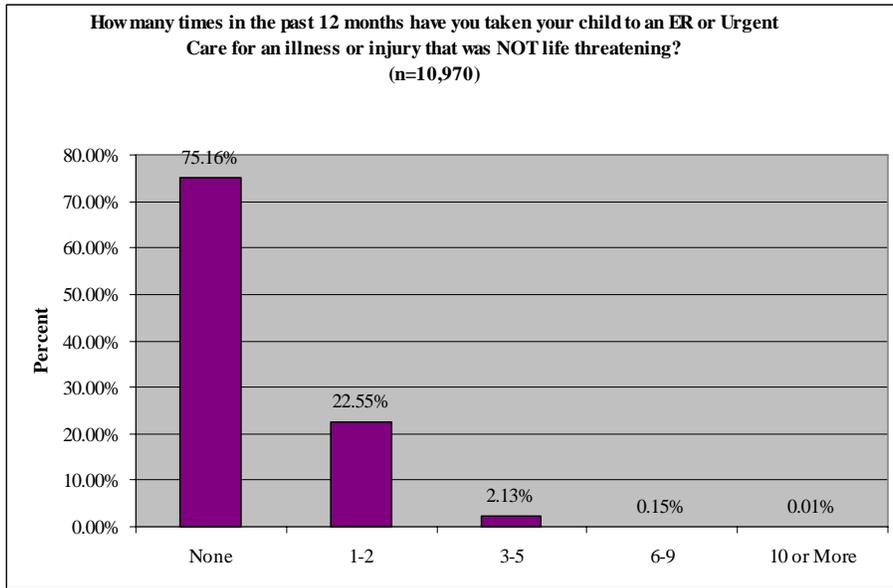


## CARE FOR ILLNESS OR INJURY

In recent years, a growing number of uninsured children with minor, non life-threatening conditions have accessed health care services in emergency care facilities. This upward trend is related to an expanding uninsured population and higher costs for health care. Most uninsured children come from lower income families that cannot afford to pay the high costs for medical care. These families are often forced to use the Emergency Room (ER) or other urgent care facilities for non life-threatening conditions.

Parents were asked about the frequency of accessing Emergency Room (ER) or Urgent Care facilities for non-emergency care for their child. Nearly 25% of respondents indicated that they had accessed an ER or Urgent Care facility for a non-life threatening illness or injury within the past 12 months.

Figure 5.1



Insurance status was not a significant indicator on whether or not the child had been to an Emergency Room or Urgent Care within the past 12 months for a non life threatening illness or injury. Figure 5.2 below shows the percentage of children within each insurance status category that have been to an ER or urgent care in the past 12 months. In both insurance categories the majority of children had not been to an ER or Urgent care for non-emergencies in the past 12 months.

Figure 5.2

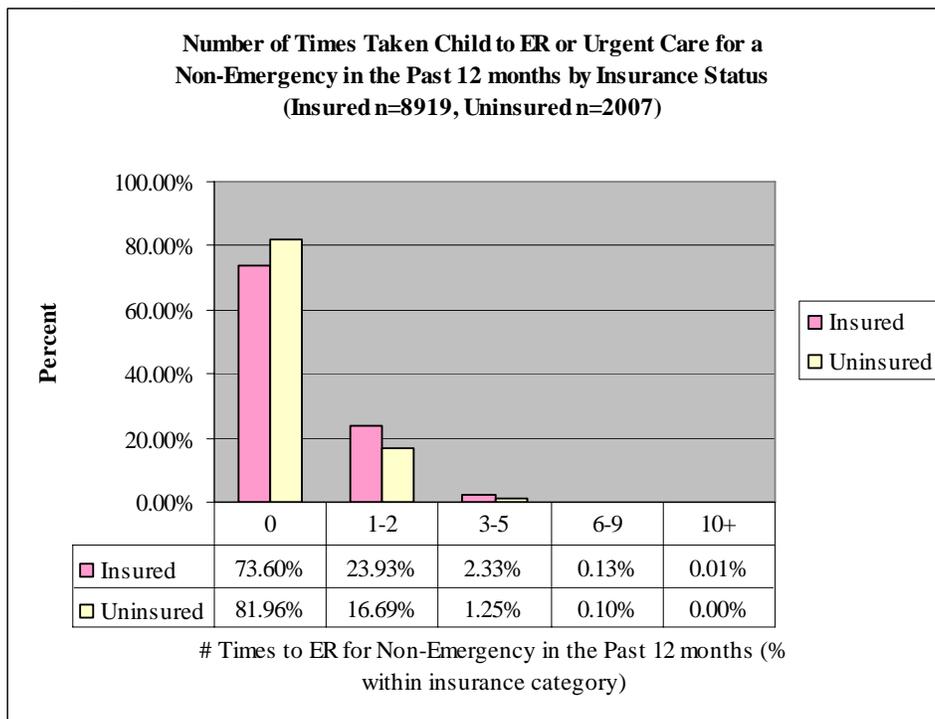
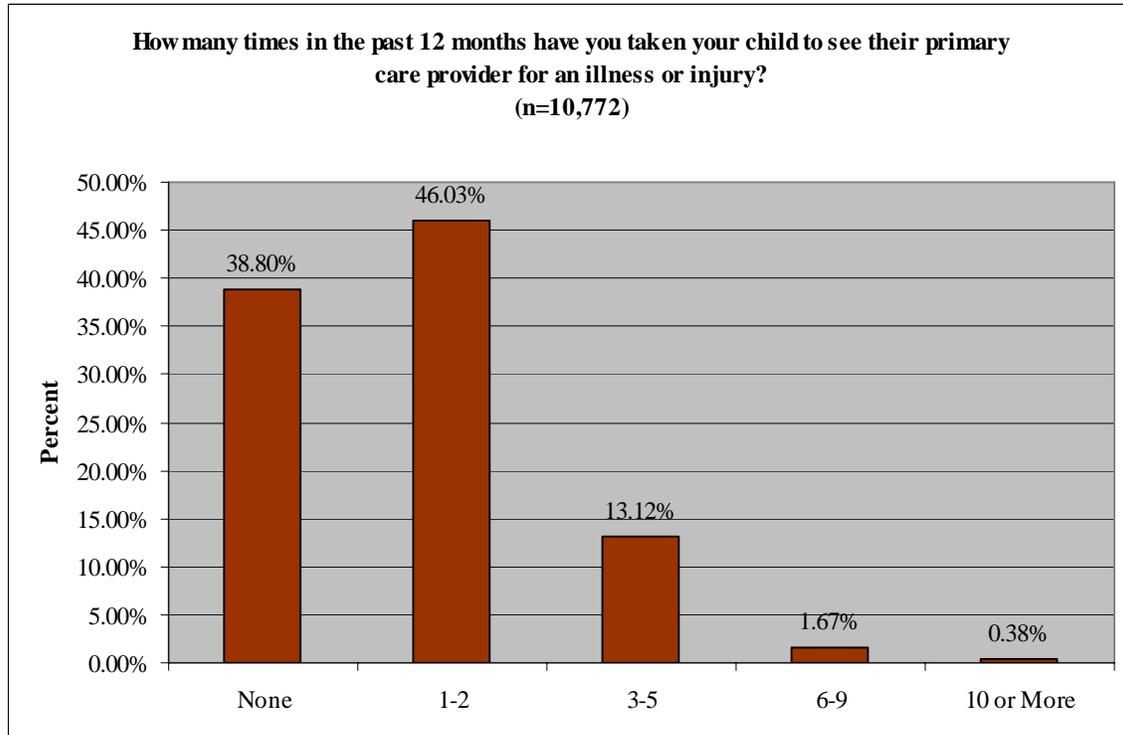


Figure 5.3 illustrates the total number of times parents had taken their child to see their primary care provider for an illness or injury in the last 12 months. The vast majority of parents (84.83%) reported that they had taken their child in less than 3 times in the past 12 months.

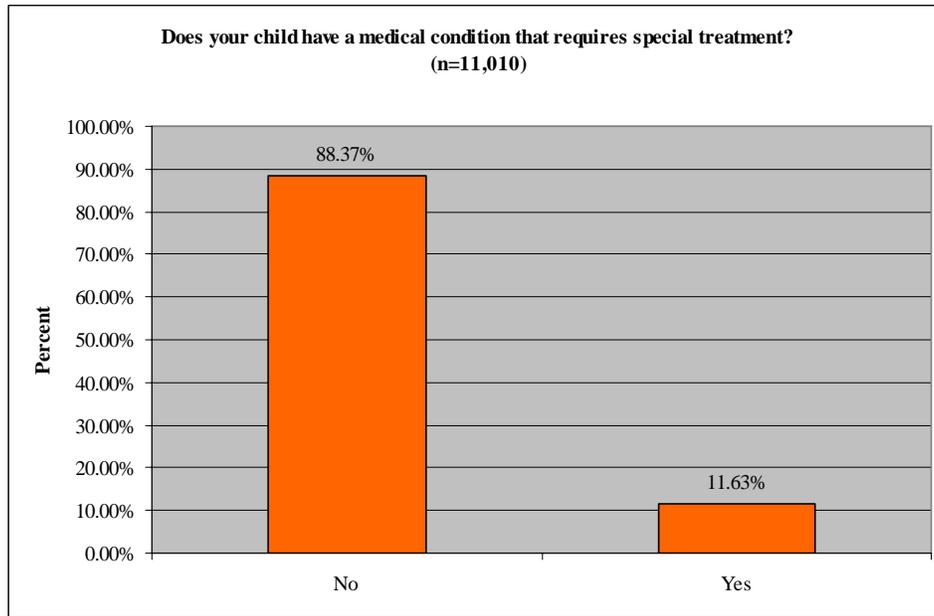
Figure 5.3



## MEDICAL CONDITIONS

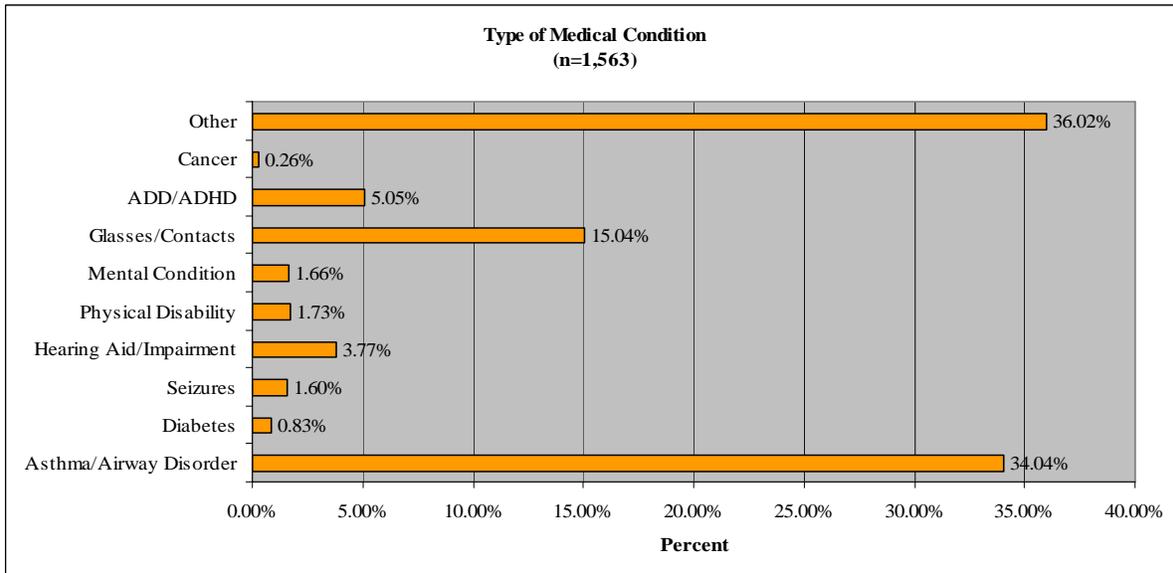
Many of Nevada's children have special medical conditions. Treatment for children with special medical conditions is often expensive and requires a team of medical care providers lead by a primary care physician that are devoted to the treatment and maintenance of such conditions. Thus, health insurance coverage is vital for children with special health conditions, as it ensures that these children to have access to ongoing care and treatment. Generally, health insurance serves as a safeguard for parents and families against the higher costs necessary in the treatment and maintenance of special medical conditions. According to the survey results, nearly 12 percent of parents indicated that their child had a medical condition requiring special treatment.

Figure 6.1



As Figure 6.2 illustrates below, the most common medical conditions indicated were asthma (34.04%), glasses and contacts (15.04%), and ADD/ADHD (5.05%). A study released by the University of Rochester Medical Center (2008) examining the health insurance status of American children with asthma found that 13 percent of children with asthma (759,000) were uninsured at some time during the year. These children were more likely than insured children to be at risk for severe complications and unnecessary hospitalizations.

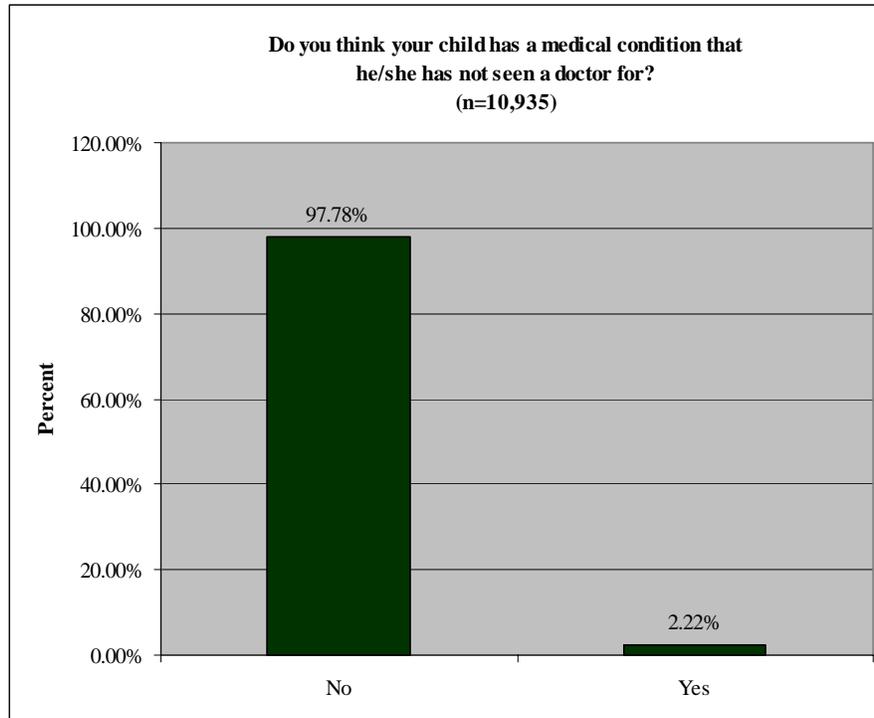
Figure 6.2



\* “Other” conditions included allergies, dental problems, chronic infections, digestive disorders, etc.

Respondents were also asked if they thought their child had a medical condition that he/she has not seen a doctor for. The vast majority of parents reported taking their child in to see a doctor for any medical conditions they thought their child may have.

Figure 6.3



Only 2.22% of survey respondents indicated that their children had not seen a doctor for a suspected medical condition. Of the respondents that indicated that their child had not seen a doctor for a suspected medical condition, 35.4% did not have insurance which is nearly twice the percentage of uninsured for all participants in the survey (Total with no insurance=18.41% see Figure 2.1)

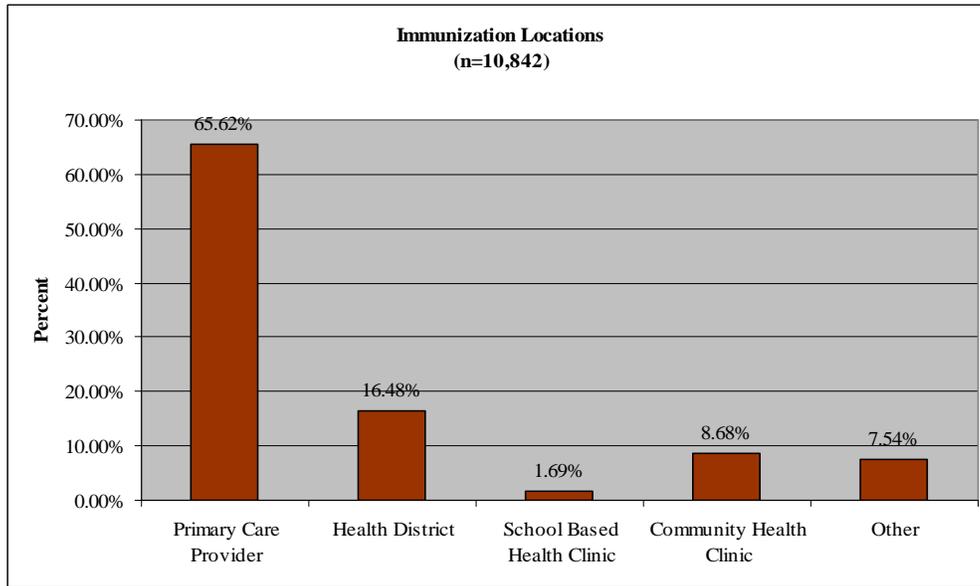
## IMMUNIZATIONS

Immunizing children in Nevada is important to preventing the spread of certain childhood diseases and avoiding a public health crisis. According to the Centers for Disease Control and Prevention (2006), vaccinations are particularly important for children, as they have lower disease-fighting immunity than adults and may be more susceptible to complications. Getting children immunized also protects the community by preventing the spread of infections diseases.

To ensure all children receive their immunizations on schedule, there is a broad array of organizations and clinics around Nevada that offer low-cost immunizations for children. Some common locations that offer immunizations for children include: primary care providers office, local health districts, school-based health clinics, and community health clinics. According to the results of this survey, a majority of children were immunized by a primary care provider (64.78%). Local health districts were the second most common place for children to get immunized (16.31%) followed by community health clinics (7.5%) and school-based health

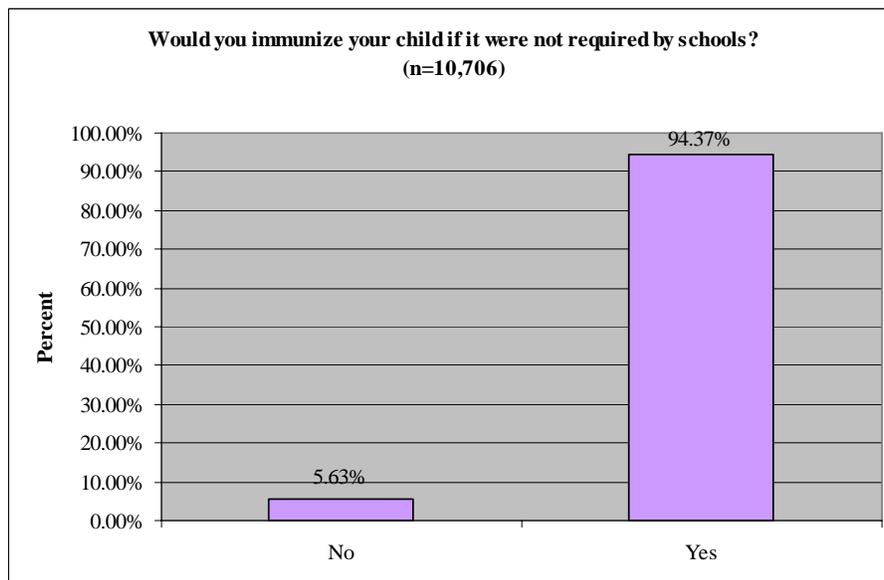
clinics (1.66 percent). Those responses placed in the “Other” category (7.54%) included parents that indicated multiple locations for receiving immunizations, those using military facilities, WIC Providers, as well as those that indicated that they chose not to immunize their child due to religious beliefs or doctor’s recommendations.

Figure 7.1



It seems that most of Southern Nevada’s parents understand the importance of immunizing their children against diseases. Just over ninety-four percent of parents would still immunize their children, even if immunizations were not required by law. However, 603 parents indicated that they would not have their child immunized if it were not required by law. The demographics for these respondents were very similar to the demographics for the entire sample. However, there were slightly more Caucasians (45.1% compared to 39.6% overall) as well as slightly more reporting that their child did not have health insurance (21.6% compared to 18.4% overall).

Figure 7.2

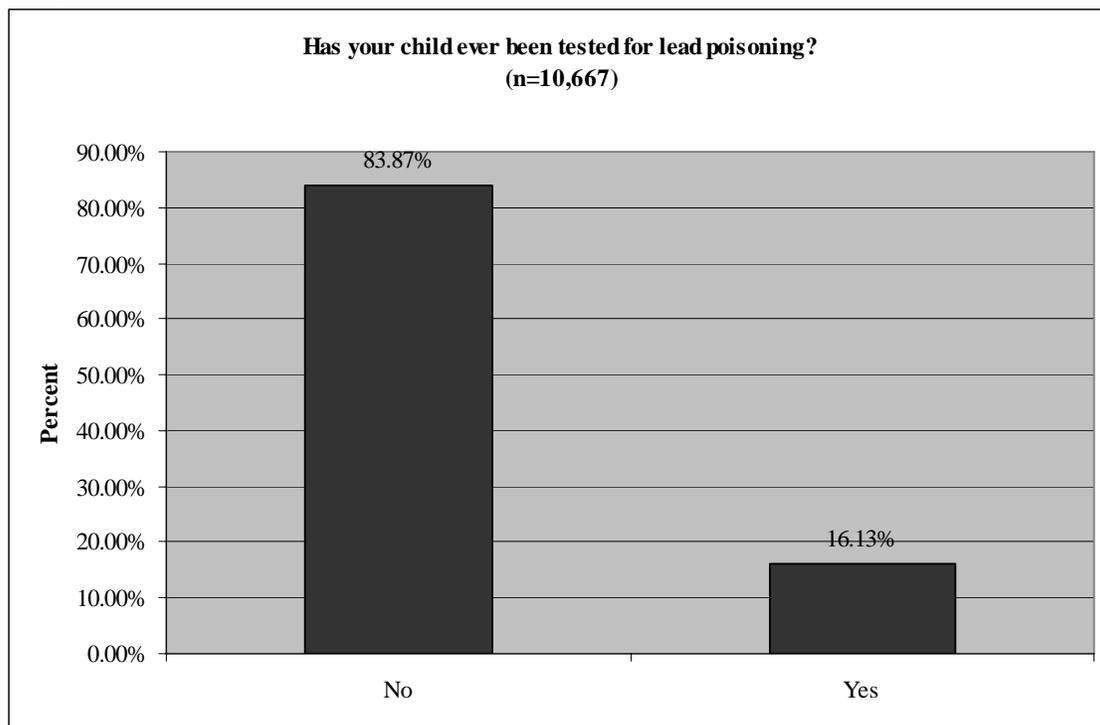


## LEAD SCREENING

Screening for elevated blood lead levels is important to prevent serious health complications in Nevada's children exposed to lead. Testing for elevated blood lead levels enables health care practitioners and public health professionals both to treat exposed children and to track the source of the lead exposure. In an effort to establish federal and state targets to control lead exposure, the Childhood Lead Poisoning Prevention Program (CLPPP) was established in Southern Nevada.

In the current study, parents were asked whether or not their child had been tested for lead poisoning. Only a small percentage of children (16.12%) had been tested for lead poisoning as of the time of the study. Further efforts to encourage screening of children, particularly at 12 and 24 months of age, are needed to fully understand the level of exposure in Nevada.

Figure 8.1

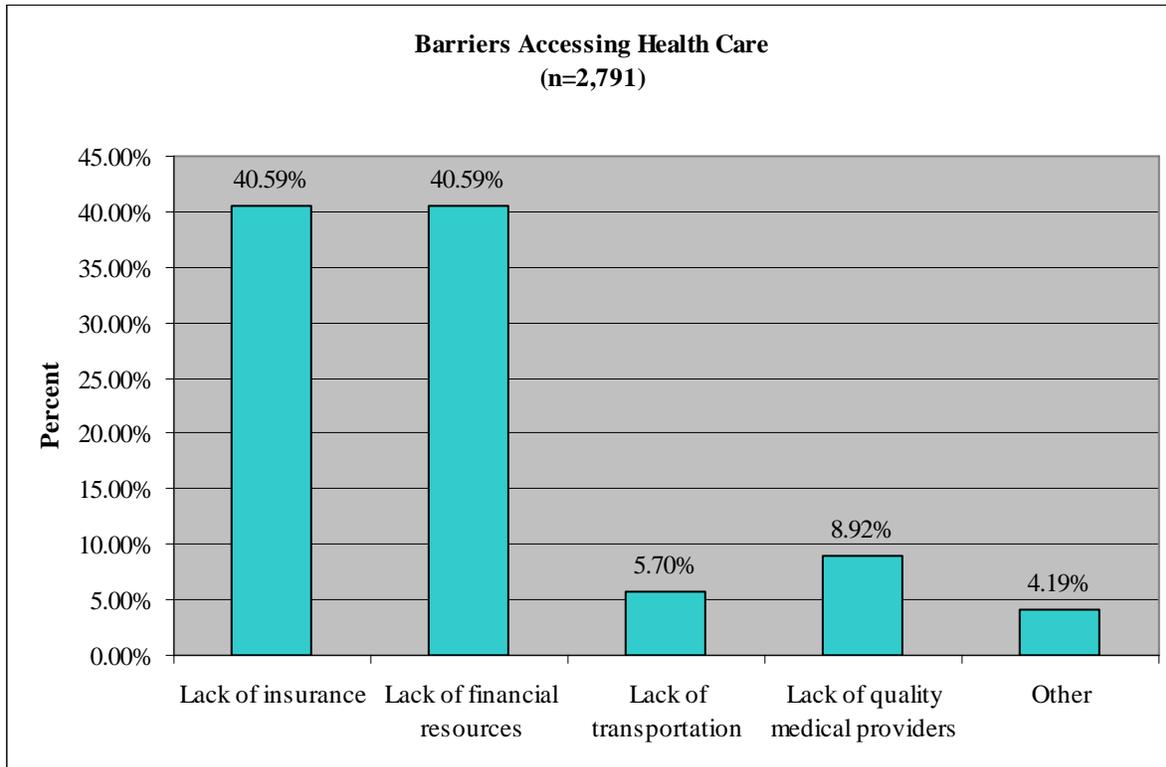


## ACCESS TO HEALTHCARE AND COMPLIANCE

Barriers to health care access are those structural, procedural, or situational mechanisms that hamper children's access to health care services. When asked about barriers to accessing health care, most of the survey respondents 83.76% indicated that they had not experienced barriers to accessing health care for their children. However, 16.24% (n=1,775) of participating parents indicated that they had experienced barriers to accessing health care for their children. Upon reviewing the demographics of parents who had experienced barriers to accessing medical care, there were a disproportionate percentage of Hispanic parents in this group, 38.4% compared to

33.19% overall, over half (51.5%) those that reported experiencing barriers to accessing healthcare did not have insurance, which is nearly three times the number of all participants without insurance, and nearly half (40.7%) of these parents reported an annual household income of less than \$25,000.

Figure 9.1



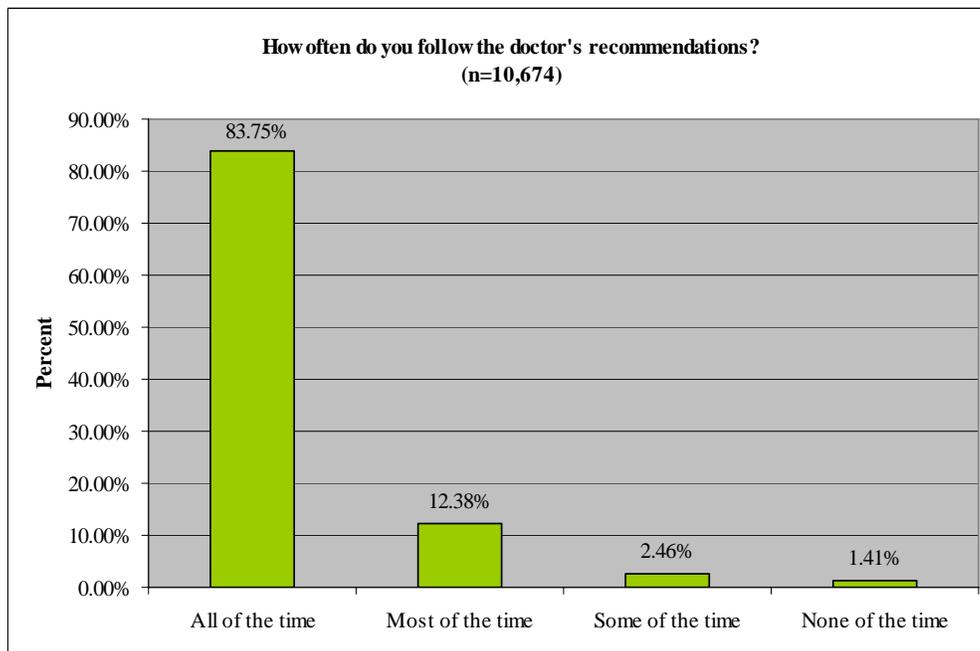
Not surprisingly, financial barriers (40.58%) and lack of insurance (40.00%) were cited as the two most common barriers parents experienced in accessing health care for their children. Most parents of uninsured children cannot afford to pay the high out-of-pocket costs charged for medical services. A recent report examining uninsured families found that financial barriers were less likely to be an issue for lower income families with an insured child or children (Kaiser Family Foundation 2009). Even if children are covered by health insurance, other financial barriers such as high co-pays or premiums are likely to impede children’s access to health care. A combination of these financial barriers may result in many parents forgoing necessary medical care for their children.

Responses in the “Other” category included: language barriers, not having adequate insurance coverage, and bad experiences with doctors in the past. Some respondents indicated that waiting lists and long wait times in offices were also barriers to accessing care for their children. This category was not mutually exclusive, meaning that respondents could indicate multiple barriers.

Parents were also asked about how often they followed the recommendations provided by their child’s doctor. According to the survey results, most parents (83.75%) indicated that they followed their child’s doctor’s recommendations all of the time. Only 1.41 % reported that they

followed their children’s doctor’s orders ‘none of the time’. If parents indicated anything other than “all of the time” in response to this question they were asked to list reasons that they were unable to comply with the doctor’s recommendations. The most frequently listed reasons had to do with financial barriers, indicating that the family could not afford the prescribed care plans because of lack of insurance or inadequate income. Second to that reason were various accessibility issues, including inconvenient scheduling of appointments and treatments, frustration with getting automated messages when calling a doctor, and lack of adequate transportation. The remaining responses indicated a lack of trust in medical providers, forgetting to administer medications, or that the child was feeling better so the parent chose not to continue with the prescribed care plans. These responses can help demonstrate further the impact of barriers to adequate healthcare for families as it impacts not only their ability to see a medical care provider but also follow through with prescribed care plans.

Figure 9.2



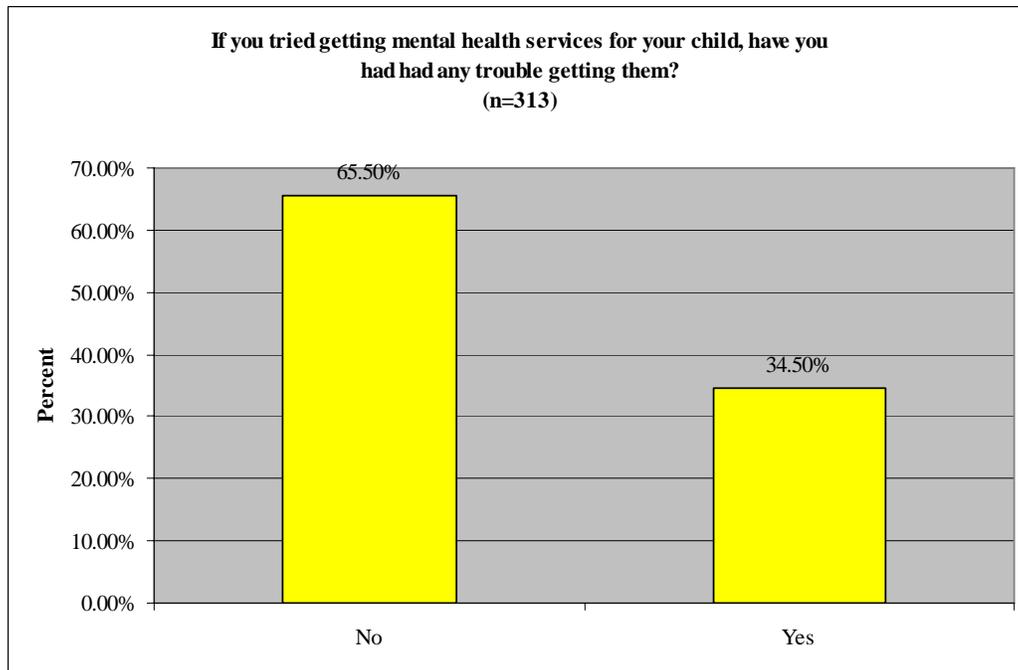
## MENTAL HEALTH

Many of Nevada’s children have mental health conditions that require specialized treatment from mental health providers. 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. 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 (Brown, 2004).

The survey results indicated only a small percentage, 3.37% (n=313) of respondents have tried to access mental health services for their children. Out of the parents who have tried to access these services (n=313), just over one third (34.5%) of parents reported having trouble accessing mental health services for their children. A disproportionate number of these parents were uninsured (25.2% compared to 18.4% overall), and 35.4% reported an annual household income of less

than \$25,000, compared to 17.3% overall. In terms of geographic location and race/ethnicity this sub-group was comparable to the total sample.

Figure 10.1

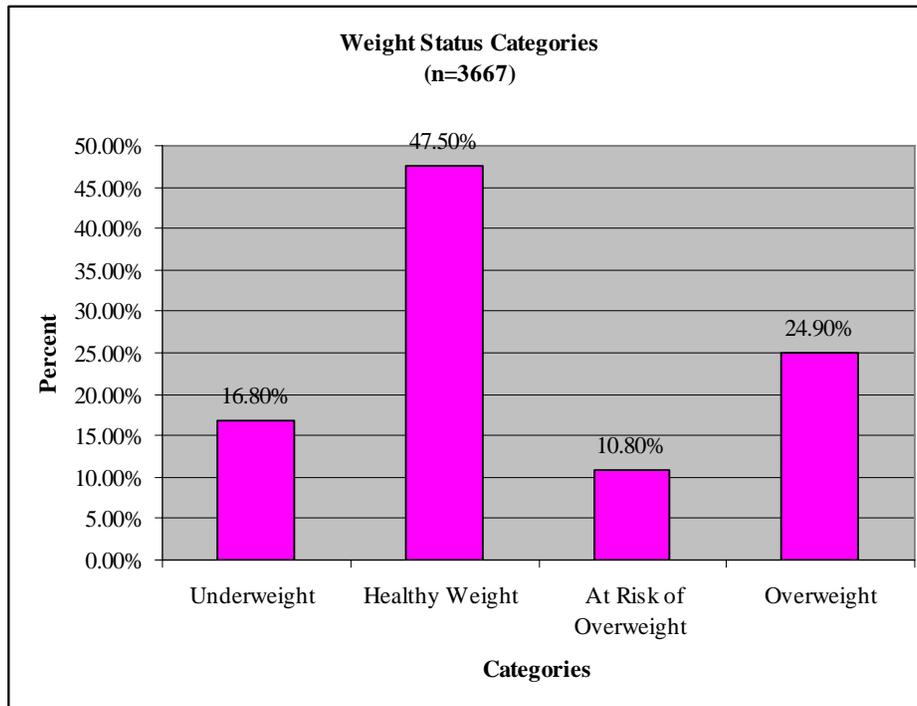


## WEIGHT AND HEALTHY BEHAVIORS

Childhood obesity is a growing public health problem across the entire country. Epidemiologists have shown increases in children with Type II diabetes in recent years. Therefore, monitoring children's weight has become even more important. For this survey parents were asked to write in their child's height and weight information. NICRP used this information to calculate a BMI for all children. Many of the respondents left one or both of these questions blank, resulting in only 3,667 cases (33.1%) that had enough information to calculate BMI.

Once BMI was calculated they were grouped based on CDC categories for weight using the percentile associated with the child's BMI, age and gender. For the purpose of this study researchers assumed that children were around 5 years of age or 60 months. There were no differences in the percentile tables for BMI values for boys compared to girls. The categories include: underweight (BMI less than the 5<sup>th</sup> percentile), healthy weight (BMI between the 5<sup>th</sup> percentile and less than 85<sup>th</sup> percentile), at risk of overweight (BMI between the 85<sup>th</sup> to less than 95<sup>th</sup> percentile), and overweight (BMI equal to or greater than the 95<sup>th</sup> percentile). The percentages for participants in this study are presented in Figure 11.1 below.

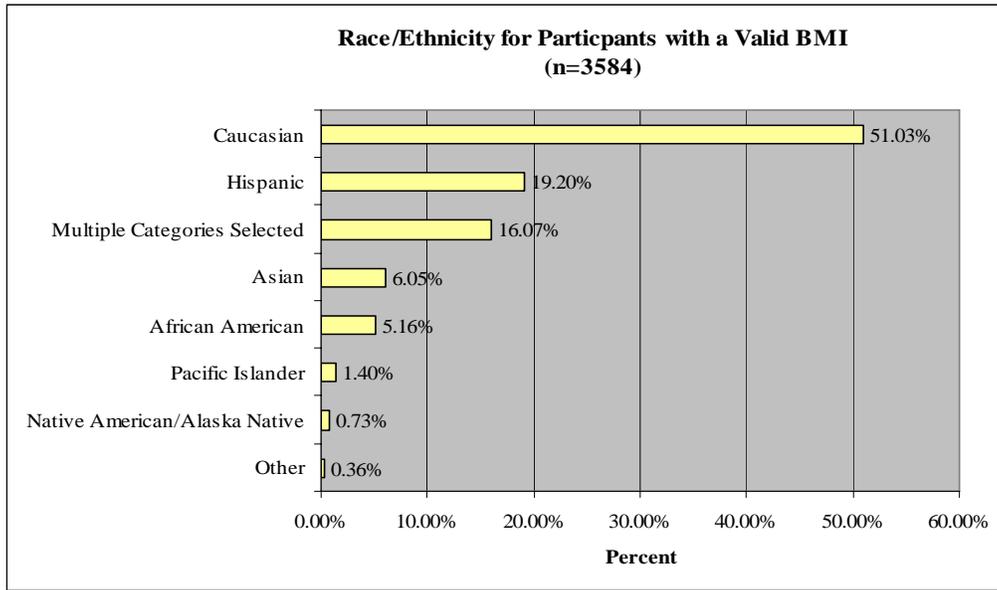
Figure 11.1



Almost half (47.5%) of children entering kindergarten whose parents participated in this survey are of a healthy weight. However, almost one fourth of these children are overweight and combining those that are at risk of being overweight and currently overweight this is just over one third (35.7%) of all respondents. There were no significant differences between the total sample and those that were in the overweight category with regard to insurance status, annual household income, geographic location, or gender (there were slightly more males than female in the at risk and overweight categories).

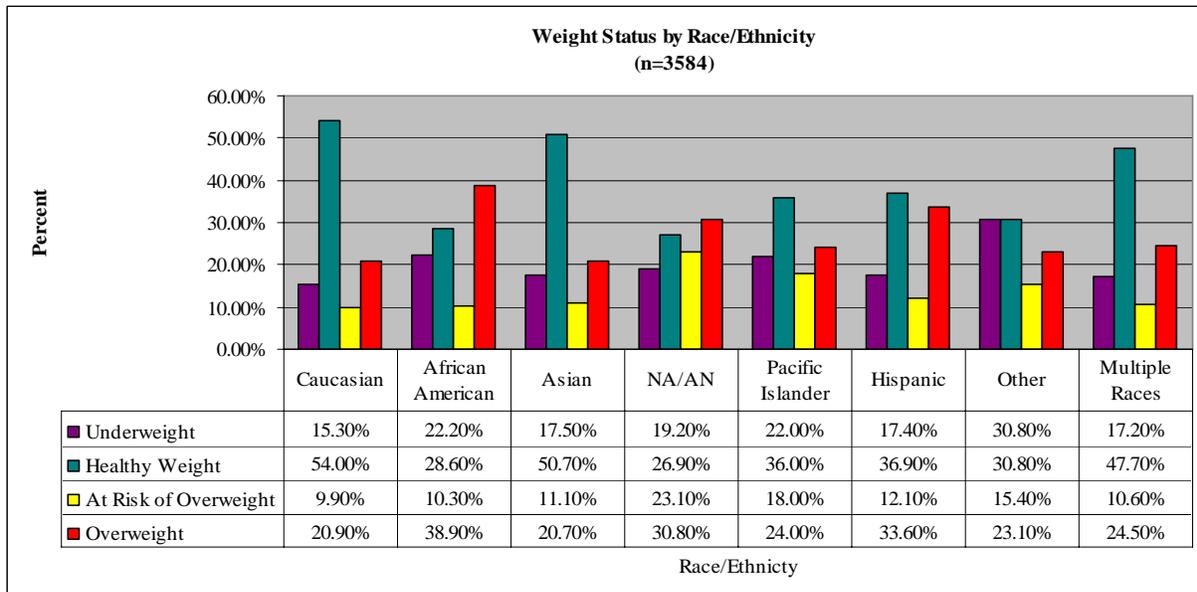
However, in comparing the child's race ethnicity with their BMI we can see some differences in their distribution across weight categories for each racial/ethnic group. It is important to note that the total number of participants included in this analysis is even fewer than those in the previous display of the child's BMI category. This is because to be included in this analysis, respondents must have indicated their child's height, weight and race/ethnicity. The distribution of race/ethnicity for this group only varies slightly from the entire sample, with there being a greater concentration of Caucasian participants eligible for this analysis and about 14% fewer Hispanic participants eligible for this analysis. Figure 11.2 illustrates the race/ethnicity data for this group.

Figure 11.2



In Figure 11.3 we can see that African American and Native American/Alaska Native children had a greater percentage of children that were overweight (38.9% and 30.8% respectively), while Hispanic children were equally distributed between healthy weight (36.9%) and overweight (33.6%). For Caucasian and Asian children, there were more children at a healthy weight than overweight within each of these racial categories. In addition, in comparing the overall percentages of the respondents that are overweight (24.9%) and those at risk of being overweight (10.8%), almost all non-white children (with the exception of Asian children) are disproportionately represented in these categories.

Figure 11.3

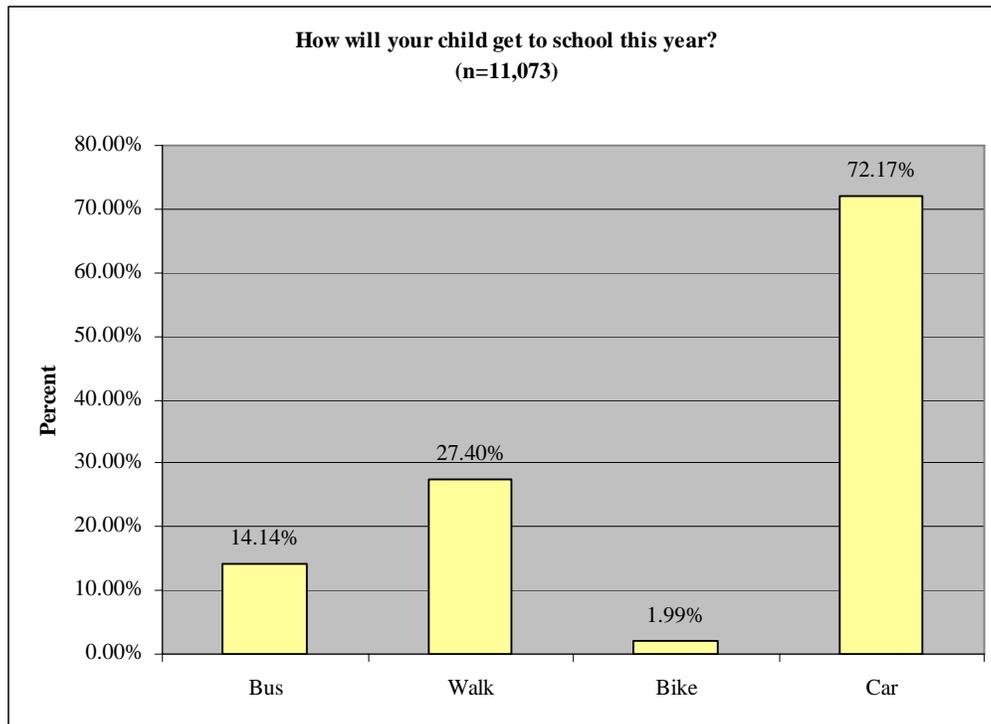


\* These findings are significant at p=.000

\*\* Percentages are calculated out of the total number in each racial/ethnic category (NA/AN – Native American/Alaska Native)

In conjunction with children’s BMI, the current study attempted to get some baseline information for physical activity by asking about how parents plan to get their child to school. Studies on childhood obesity and physical activity indicate that children that walk to school are less likely to be overweight. Parents were asked how they planned to get their child to school this year. Parents could choose multiple answers to this question so responses are not mutually exclusive, meaning one parent could select all four response categories if they so chose. Percentages in Figure 11.4 represent the number of parents that selected each option out of the total number of participants, 11,073.

Figure 11.4



Most parents (72.2%) indicated their children would get to school this year by car. 14.1% of parents stated their children would ride the bus. Almost a third of parents (29.4%) reported that their child would be either walking or riding a bike to school this year. In terms of geographic location there were no significant differences between rural and urban respondents in how their child would get to school with the exception of walking and riding the bus to school. Parents of children in rural areas reported that they would take the bus more than twice as often as those in urban areas (12.6% urban, 27.4% rural), and conversely nearly twice as many parents living in urban areas (29.4%) reported that their child would be walking to school than those in rural areas (15.9%). This is possibly due to the longer distances children in rural areas are likely to have to go to get to their elementary school as compared to more urban areas.

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# APPENDIX A: SURVEY INSTRUMENT



## Kindergarten Health Survey

**DEAR PARENT OR GUARDIAN:** *The following 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 Southern Nevada Health District and the Clark County School District. The information gathered in 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 in kindergarten. All information gathered will be used to discuss children's health on a group level, not an individual level. Your child's name will never be connected to your responses in any way. Confidentiality will be maintained without qualification.*

**Child's Date of Birth:** \_\_\_\_/\_\_\_\_/\_\_\_\_  
**Gender of Child (circle one):** Male Female  
**Annual household income (circle one):**  
1. \$0 - \$14,999      5. \$45,000-54,000  
2. \$15,000 - \$24,999      6. \$55,000-64,999  
3. \$25,000 - \$34,999      7. \$65,000 +  
4. \$35,000 - \$44,999

**Elementary School Name:** \_\_\_\_\_  
**Weight of Child:** \_\_\_\_\_ lbs. **Child's Height:** \_\_\_\_\_ ft. \_\_\_\_\_ in.  
**Child's Race/Ethnicity (circle all that apply):**  
1. Caucasian      5. Pacific Islander  
2. African American      6. Hispanic  
3. Asian      7. Native American/Alaskan Native  
4. Other (please specify): \_\_\_\_\_

**How many other children are living in the home? (circle one):** 0 1 2 3 4 5 6+

**Please answer the following questions for the child that is enrolled in kindergarten this year.**

1. Is your child currently covered by medical insurance?  Yes  No  
If yes, what type of insurance?  Private  Medicaid  Nevada Check Up  Other: \_\_\_\_\_
2. Has your child been seen by a medical provider for a routine check-up (not for an illness) in the past 12 months?  
 Yes  No
3. Has your child been seen by a medical provider at least once per year for a routine check-up (not for an illness) since birth?  
 Yes  No
4. Does your child have a primary care provider (regular doctor, nurse practitioner or physician's assistant)?  
 Yes  No
5. Has your child seen a dentist in the past 12 months?  Yes  No
6. Within the last 12 months how many times have you taken your child to the Emergency Room or Urgent Care for an illness or injury that was not life-threatening?  None (0)  1-2  3-5  6-9  10 or more
7. Within the last 12 months, how many times have you taken your child to see their primary care provider (regular doctor, nurse practitioner or physician's assistant) for an illness or injury?  None (0)  1-2  3-5  6-9  10 or more
8. Have you been told that your child has a medical condition which requires specialized treatment or visits to a specialty medical care provider?  Yes  No  
If yes, please check all conditions that apply:  Asthma/Airway Disorder  Diabetes  Seizures  
 Hearing Aid/Impairment  Physical Disability  Mental Health Condition  Glasses/Contacts  
 ADD/ADHD  Cancer  Other (specify): \_\_\_\_\_
9. Do you think that your child may have a medical problem that you have not gone to see a doctor for?  
 Yes  No If yes, please specify: \_\_\_\_\_
10. Where do you take your child for immunizations (shots)? If you have used more than one type of facility, please indicate the most recent:  Primary Care Provider (regular doctor)  Health District  
 School-Based Health Clinic  Community Health Clinic  Other (specify): \_\_\_\_\_
11. If immunizations were not required for school, would you still have your child immunized?  Yes  No
12. Has your child ever been tested for lead poisoning?  Yes  No
13. Have you experienced any barriers to accessing health care for your child?  Yes  No  
If yes, please check the barriers you have experienced:  
 Lack of insurance  Lack of transportation  Lack of quality medical providers  
 Lack of financial resources (money)  Other (please specify): \_\_\_\_\_
14. Have you ever tried to get mental or behavioral health services for your child?  Yes  No  
If yes, have you had trouble getting services?  Yes, explain: \_\_\_\_\_  No
15. In general, are you able to follow your doctor's recommendations in regard to medications and/or follow up visits?  
 All of the time  Most of the time  Some of the time  None of the time  
If you were unable to follow your doctor's recommendations "all of the time", please list the primary reason(s) why not: \_\_\_\_\_
16. How will your child get to school this year?  Bus  Walk  Ride Bike  Car  Other: \_\_\_\_\_

**PLEASE RETURN THIS SURVEY TO YOUR CHILD'S TEACHER BY FRIDAY, SEPTEMBER 12, 2008**

Thank you for your participation. If you are interested in participating in future research please contact the Nevada Institute for Children's Research and Policy at (702) 895-1040 or via email at nicrp@unlv.nevada.edu.



Cuestionario de Salud de Kinder

ESTIMADOS PADRES DE FAMILIA O TUTORES: La siguiente encuesta ha sido diseñada por el Nevada Institute Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboración con el Centro de Salud de Sur Nevada y el Distrito Escolar del Condado de Clark. La información adquirida en este estudio se utilizará para ayuda comprender la salud de los niños que comienzan preescolar este año. Le hemos pedido que participe porque usted tiene niño en preescolar. Toda la información obtenida será utilizada para discutir y estudiar el nivel de salud en grupo pero individual. No habrá conexión entre el nombre de su niño(a) y sus respuestas. Este estudio será confidencial.

Fecha de nacimiento del niño: \_\_\_/\_\_\_/\_\_\_ Nombre de la escuela primaria: \_\_\_\_\_
Sexo del niño(a) (circule uno): Masculino Femenino Peso Del Niño(a): \_\_\_ lbs. Estatura del Niño(a): \_\_\_ ft. \_\_\_ in.
Ingreso anual del hogar (circule uno): Etnicidad del Niño(a) (circule todos los que apliquen):
1. \$0 - \$14,999 5. \$45,000 - \$54,999 1. Americano 4. Nativo Americano/Nativo Alaska
2. \$15,000 - \$24,999 6. \$55,000 - \$64,999 2. Afro Americano 5. Isleño Pacífico
3. \$25,000 - \$34,999 7. \$65,000 + 3. Asiático 6. Latino
4. \$35,000 - \$44,999 7. Otro (especifique): \_\_\_\_\_
¿Cuántos niños viven en casa? (circule uno) 0 1 2 3 4 5 6+

Por favor conteste las siguientes preguntas sobre el niño(a) que se va a matricular en kinder este ano.

- 1. ¿Su niño(a) en este momento cuenta con seguro medico? [ ] Si [ ] No
¿Encaso de sí? ¿Qué tipo de seguro? [ ] Privado [ ] Medicaid [ ] Nevada Check-up [ ] Otro: \_\_\_\_\_
2. ¿Su niño(a) ha sido visto por un proveedor de servicio médico este año para un examen de rutina (no por enfermedad) en los últimos 12 meses? [ ] Si [ ] No
3. ¿Su niño(a) ha sido visto por un proveedor de servicio médico al menos una vez al año para un examen medico (no por una enfermedad) desde su nacimiento? [ ] Si [ ] No
4. ¿Tiene su niño(a) un medico familiar (médico, enfermera de práctica o asistente de médico)? [ ] Si [ ] No
5. ¿Ha visto su niño(a) a un dentista en los últimos 12 meses? [ ] Si [ ] No
6. En los últimos 12 meses, ¿cuántas veces ha tenido que llevar a su niño(a) a la sala de emergencias por una enfermedad o lesión sin peligro la vida? [ ] Ninguna [ ] 1-2 [ ] 3-5 [ ] 6-9 [ ] 10 o mas
7. En los últimos 12 meses, ¿cuántas veces ha llevado a su niño(a) a ver a un proveedor primario de cuidados de salud (médico, enfermera o asistente de médico) para una enfermedad o lesión? [ ] Ninguno [ ] 1-2 [ ] 3-5 [ ] 6-9 [ ] 10+
8. ¿Le han dicho que su niño(a) tiene una condición médica que requiere tratamiento especializado o visitas a un proveedor de cuidado médico especializado? [ ] Si [ ] No
Si la respuesta es sí, por favor, escoja todas las condiciones que apliquen.
[ ] Oído/Discapacidad Auditiva [ ] Discapacidad medica [ ] Condición de Salud Mental [ ] Lentes/ de Contacto
[ ] ADD(Síndrome de déficit de atención) /ADHD(Síndrome de déficit de atención e hiperactividad)
[ ] Cáncer [ ] Otro (especifique): \_\_\_\_\_
9. ¿Cree que su niño(a) puede tener un problema médico pero usted no ha ido a ver a un médico? [ ] Si [ ] No
Si la respuesta es sí, por favor explique: \_\_\_\_\_
10. ¿Dónde lleva a su hijo para inmunizaciones (vacunas)? Si ha utilizado más de un tipo de local, por favor, indique la más reciente: [ ] Proveedor cuidado primario (médico regular) [ ] Centro de Salud [ ] Clínica de salud basada en la escuela [ ] Clínica de Salud Comunitaria [ ] Otros (especifique): \_\_\_\_\_
11. Si las vacunas no fueran necesarias para la escuela, ¿Vacunaría (inmunizaciones) a su niño? [ ] Si [ ] No
12. ¿A sido su niño(a) examinado por contaminación de plomo? [ ] Si [ ] No
13. ¿Se ha enfrentado con obstáculos en el acceso de salud para su hijo? [ ] Si [ ] No
Si la respuesta es afirmativa, por favor, explique las barreras con las cuales se a enfrentado:
[ ] La falta de seguro [ ] La falta de recursos financieros (dinero) para pagar el cuidado de la salud
[ ] La falta de transporte [ ] La falta de calidad de proveedores médicos [ ] Otro (por favor especifique): \_\_\_\_\_
14. ¿Alguna vez ha tratado de obtener servicio de salud mental o de comportamiento para su hijo? [ ] Si [ ] No
En caso que sí, ¿ha tenido problemas para obtener servicios? [ ] Si, explique: \_\_\_\_\_ [ ] No
15. En general, ¿está usted en condiciones de seguir recomendaciones del médico en cuanto a medicamentos y/o seguimiento de las visitas? [ ] Todo el tiempo [ ] La mayor parte del tiempo [ ] Algunas de las veces [ ] Nunca
Si no pudo seguir las recomendaciones del médico "todo el tiempo", por favor, anote los motivos principales ¿por qué no?: \_\_\_\_\_
16. ¿Cómo llegara su niño(a) a la escuela este año? [ ] Autobús [ ] Caminando [ ] Bicicleta [ ] Coche [ ] Otro: \_\_\_\_\_

VUELVA POR FAVOR ESTA INSPECCION A MAESTRO DE SU NIÑO POR EL VIERNES, 9/12/08
Gracias por su participación. Si estas interesado en participar en investigaciones futures por favor ponte en contacto con el Nevada Institute for Children's Research and Policy al (702) 895-1040 o via email al nicrp@unlv.nevada.edu

# Health Status of Children Entering Kindergarten



## Results of the 2009-2010 (Year Two) Nevada Kindergarten Health Survey

January 2010

This project was completed in collaboration with the following:

Clark County School District  
Nevada School District Superintendents  
Nevada Head Start State Collaboration and  
Early Childhood Comprehensive Services Office  
Nevada State Health Division

Nevada Institute For Children's Research & Policy

# NICRP

**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

School of Community Health Sciences

HEALTH SCIENCES

**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 Community Health Sciences, 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 didn't want to stop there; she wanted to transform that research into meaningful legislation that would make a real difference in the lives of our children.

**NICRP's Mission:** The Nevada Institute for Children's Research and Policy (NICRP) looks out for Nevada's children. 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: <http://www.nic.unlv.edu>

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## INTRODUCTION

Academic achievement for children is vital to their success in life. Those that do well in school have greater opportunities for post-secondary education, and later have better prospects for employment. One of the major factors that can affect a child's academic achievement is his or her health status. Academic outcomes and health conditions are consistently linked in the literature (Taras & Potts-Datema, 2005). Children with poor health status, and especially those with common chronic health conditions, have increased numbers of school absences and more academic deficiencies (Taras & Potts-Datema, 2005). In a study concerning excused versus unexcused absences, children with greater absenteeism had lower academic performance, and those with excused absences performed better than those with unexcused absences (Gottfried, 2009). Therefore, to increase the likelihood for academic success in children, we need address their health concerns. Preventative care is crucial to a child's ability to succeed in school.

According to data from the KIDS COUNT Data Center at the Annie E. Casey Foundation (2009), 11 percent of Nevada's teens are high school dropouts, compared to 7 percent nationally. The national dropout prevention center lists poor attendance and low achievement as two of the significant risk factors for school dropout (Hammond et al., 2007). Additionally studies examining school dropout rates indicate that early intervention is necessary to prevent students from dropping out of school. Middle and high school students that drop out likely stopped being engaged in school much earlier in their academic career. Therefore, early prevention and intervention is crucial to improving graduation rates. Ensuring that children have their basic needs met, including receiving adequate health care, can directly impact a child's academic achievement as well as increase their likelihood for high school graduation.

To gain baseline information on the health status of children entering the school system and better track student health status, the Nevada Institute for Children's Research and Policy (NICRP), in partnership with the state's 17 school districts, the Southern Nevada Health District (SNHD), and the Nevada State Health Division (NSHD), conducted a health survey examining the health status as well health insurance status of Nevada's children entering kindergarten. This study was conducted with the goal of quantifying the health status of children as they enter school to be able to identify specific areas for improvement to eventually increase academic success among Nevada's students.

## METHODOLOGY

In 2008, NICRP partnered with the Clark County School District (CCSD) and the SNHD to create a health survey designed for parents of children entering kindergarten. The survey was intended to provide a general understanding of the overall health status of children when they enter school. The short questionnaire was developed in both English and Spanish and contained 22 questions. During the development of the project, the NSHD presented the opportunity to participate in the survey to officials in other school districts within Nevada. The superintendents of all 17 school districts in the state agreed to participate in the first year of the study.

In the fall of 2009, NICRP revised the health survey, based on analyses of the first year's survey responses, to obtain a second year of data on the state's kindergarteners. Questionnaires were

distributed to kindergarten teachers in all public elementary schools in the state, with the exception of schools in Esmeralda and Clark counties. Esmeralda County, a rural county with 5 kindergarteners enrolled in the 2009-2010 school year, chose not to participate in the survey, while the Clark County School District requested that only a sample of their schools be included in the survey to reduce burden on school staff.

Therefore, in Clark County, surveys were sent to a randomly selected sample of schools ( $n = 140$ ) in the district to obtain a 5 percent margin of error in survey results. Schools were chosen based on their Title I status, as provided by the Clark County School District, to ensure that a representative sample was achieved. It was determined that 71 of the 213 elementary schools in the district (33.3%) were Title I schools. Forty-five schools (32.1 percent of the target 140 schools in the sample) were randomly selected using SPSS (a statistical analysis software) from a list of all Title I schools. The remaining 95 schools (67.1 percent of the needed sample of 140) were randomly selected from a list of non-Title I schools using SPSS.

For all districts, teachers distributed the surveys to parents during the first part of the school year. Parents who chose to participate then turned in the survey to either the school office or their child's teacher. The surveys were then returned to NICRP via mail.

Each survey was assigned a unique identification number by NICRP staff to aid in tracking of survey responses. All survey responses received as of January 1, 2010 were entered into the statistical analysis software PASW Statistics 17.0. The surveys completed in Spanish were entered into the English database by a bilingual staff member at NICRP. No identifying information was included on any of the surveys.

Please note that, due to an oversight when translating the survey from English to Spanish, two questions on the Spanish version of the survey differed from their English counterparts. In a question asking respondents about barriers to accessing health care, the choice "lack of money" was not available to Spanish-speaking respondents to select. Likewise, in a question asking respondents about the type of pre-school setting their child had attended in the past year, the choice "home-base" (care) was not available to Spanish-speaking respondents. However, both of these questions also included an "other" option to select, with a blank space to fill in any additional detail.

## **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 relies on the memory and honesty of the participants in the survey. Additionally, several of the questions were left blank on the surveys received. NICRP kept all surveys in the database used for analysis, but it is important to note when reading percentages presented in the figures below that not all respondents answered all questions. Some figures may have a total of 9,504 (indicating all participants responded to the question), while others may have a smaller number of total cases because of respondents leaving that particular question blank. All percentages calculated for this report are based on the total number of people answering the question, rather than the total number of people who completed a survey.

## SURVEY RESULTS

Presented in the figures below are the basic frequencies (counts and percentages) for all questions asked in the survey. Cross tabulations were also calculated for selected variables to provide additional information on specific topics. A chi-square statistic was also calculated to test for the statistical significance of the differences provided in the cross tabulation tables. Percentage calculations as well as statistical significance are presented with figures, as appropriate. The data collected for the 2009-2010 school year supplements baseline data of school-aged children in Nevada that was collected during the 2008-2009 school year.

### RESPONSE RATES

Each school district involved in this study provided the total number of kindergarten students enrolled for the 2009-2010 school year. Using this information, 24,261 surveys were sent out to participating schools. At the end of the data collection period (December 2010), 9,504 surveys were received and entered, resulting in a 39.2 percent response rate for the 15 districts in the state and the schools selected to participate in Clark County. Response rates were also calculated for each of the school districts individually. These rates ranged from 18.2 percent in Mineral County to 80.1 percent in Humboldt County, and are detailed in Table 1.1 below. In Clark County, the response rate for the schools sampled to participate was 34.7 percent.

**Table 1.1: Survey Response Rate by School District**

School District	Number of Surveys Sent Out	Number of Surveys Received	Survey Response Rate
Carson City	568	432	76.1
Churchill County	326	110	33.7
Clark County	16,161	5,610	34.7
Douglas County	419	302	72.1
Elko County	763	529	69.3
Eureka County	16	11	68.8
Humboldt County	271	217	80.1
Lander County	76	47	61.8
Lincoln County	68	49	72.1
Lyon County	647	283	43.7
Mineral County	44	8	18.2
Nye County	420	157	37.4
Pershing County	46	15	32.6
Storey County	21	12	57.1
Washoe County	4,321	1,670	38.6
White Pine County	94	52	55.3
<i>All Districts</i>	24,261	9,504	39.2

Note: Esmeralda County, with 5 kindergarteners enrolled in the 2009-2010 school year, did not participate in the survey.

Figures 1.1 and 1.2 detail parent participation by school district for all returned surveys. The pie chart illustrates the divisions between Washoe, Clark and all other counties. Because Clark County is the largest school district in the state, it was expected that Clark County parents would comprise the vast majority (59.0 percent) of the respondents for this survey. Washoe County comprised 17.6 percent of all survey responses, while responses from parents in the remaining counties accounted for 23.4 percent. These rates vary from response rates seen in the 2008-2009 survey, where Clark County's rate was 78.9 percent, Washoe County's rate was 8.8 percent, and the rate for rural counties was 12.4 percent. These differences could be attributable to the change in methodology for surveying Clark County parents (using a sample), and an increased willingness to participate by other school districts.

**Figure 1.1: Survey Participation by School District**  
(n = 9,504)

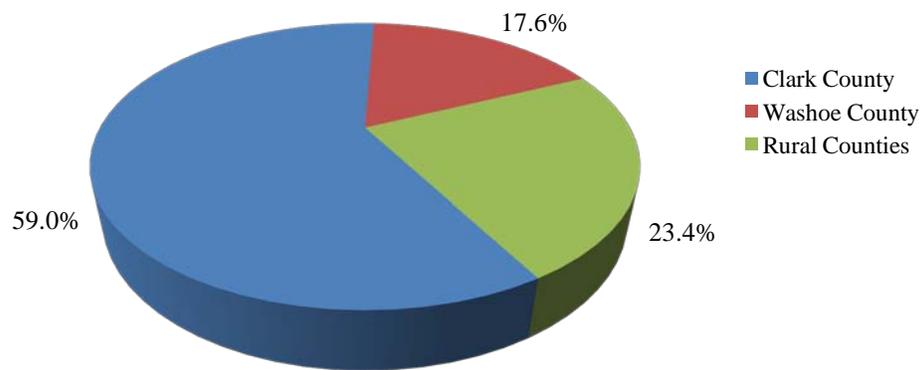
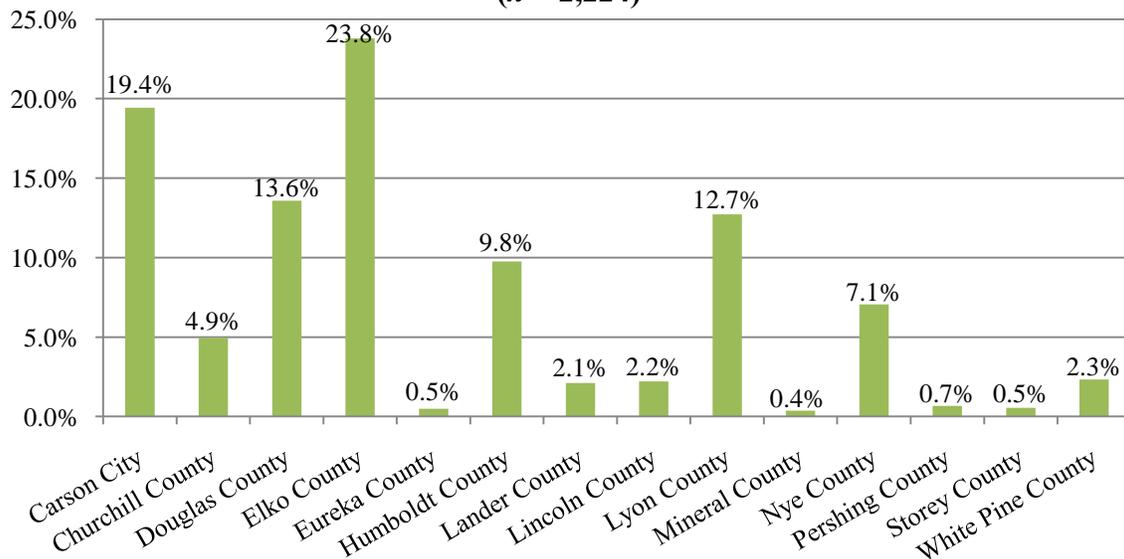


Figure 1.2 illustrates county-specific participation for all rural counties, which represent 23.4 percent of the total respondents.

**Figure 1.2: Survey Participation Among All Rural Counties**  
(n = 2,224)



## DEMOGRAPHICS

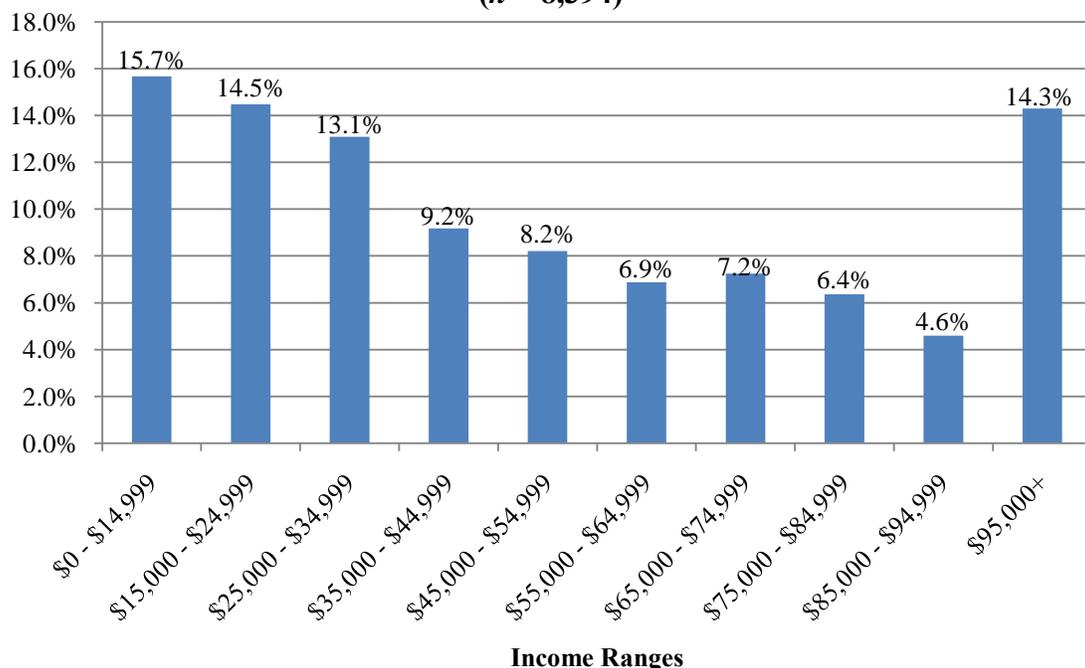
The survey was created to be one page in length, with one side written in English and the reverse side written in Spanish. Of the 9,504 completed surveys, the majority of parents (82.9 percent) completed the survey in English, while 17.1 percent completed it in Spanish.

Additionally, information on the gender of the kindergarten student was collected. Among the respondents that answered this question, the distribution was split nearly equally between males (49.8 percent) and females (50.2 percent). Approximately 4.9 percent of the sample (465 respondents) left this question blank.

Parents were also asked to respond to questions regarding their annual household income, the child's race/ethnicity, and the child's pre-school setting prior to kindergarten. Data for each of these questions are presented in Figures 1.3 through 1.5 below, with all percentages calculated using the total number of completed responses rather than the total number of returned surveys.

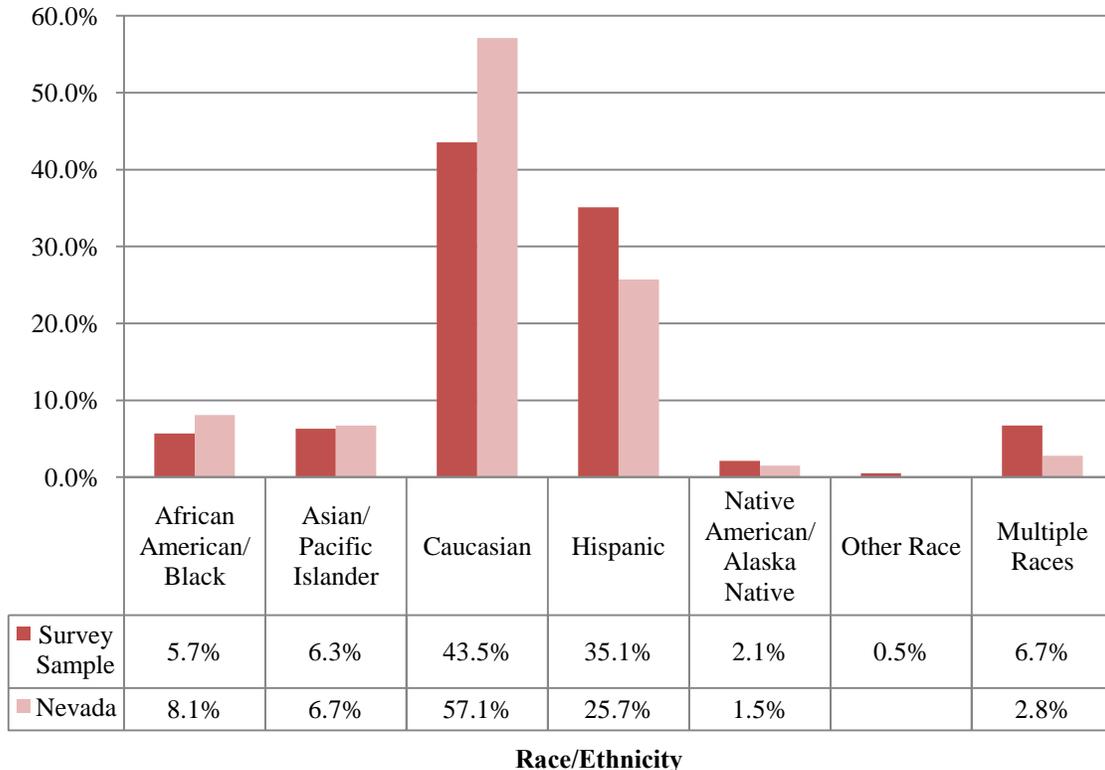
Figure 1.3 illustrates the income distribution among parents participating in the survey. According to the U.S. Census Bureau Small Area Income and Poverty Estimates, the 2008 estimated median household income in Nevada was \$56,432. This median income represents the middle value of a distribution, and is the best measure of central tendency to reduce the impact of outliers (very high or very low incomes) in the distribution. In this survey, parents reported lower annual household incomes, with 52.5 percent of all respondents reporting income below \$45,000. This represents an increase of nearly 2 percentage points from 2008-2009 school year baseline data, indicating that more families are earning less than in the previous year of the survey. Approximately 47.6 percent of respondents reported incomes of \$45,000 or more, a decrease of about 2 percentage points from baseline data.

**Figure 2.1: Annual Household Income**  
(n = 8,394)



Responses indicating the race/ethnicity of the kindergartener are roughly similar in distribution to the race/ethnicity percentages most recently estimated by the U.S. Census Bureau for the entire population in Nevada. However, there were proportionally fewer Caucasians and more people of Hispanic origin responding to this survey than seen in Nevada’s Census estimates. Figure 1.4, below, provides more detail.

**Figure 2.2: Child's Race/Ethnicity**  
(n = 8,873)

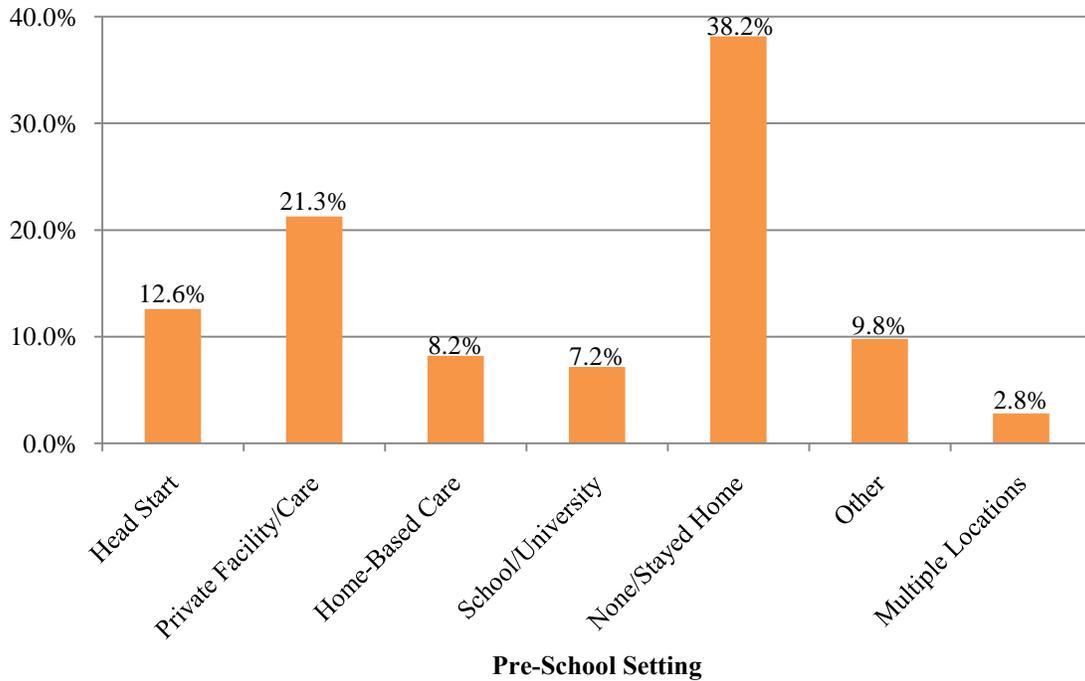


\* Nevada state data from 2008 Census QuickFacts (<http://quickfacts.census.gov>)

The survey also asked the type of pre-school setting, if any, participants’ kindergarteners had attended in the twelve months prior to kindergarten. Over one-third (38.2 percent) of respondents indicated that their kindergartener had stayed at home in the prior year, not attending pre-school. Approximately 21.3 percent of respondents stated that the kindergartener had attended a private facility for pre-school care, while 12.6 percent of kindergarteners attended a Head Start program.

Please note that this question was one of two questions that varied between the English and Spanish versions of the survey. The response choice “home-based care” was not available on the Spanish survey, but was available on the English version. Therefore, the overall distribution of pre-school settings shown in Figure 2.3 may be slightly skewed.

**Figure 2.3: Child's Type of Pre-School Setting During Past Twelve Months**  
(n = 9,258)



\* Please note that the choice “Home-Based Care” was not available on the Spanish version of the survey.

### INSURANCE STATUS

Many children in Nevada and across the country are uninsured. According to the U.S. Census Bureau Current Population Survey, approximately 9.9 percent of children under the age of 18 in the United States are uninsured, while 19.1 percent of children under the age of 18 in Nevada are uninsured. Nevada has consistently ranked near the bottom of nationwide rankings with regard to the number of children covered by health insurance.

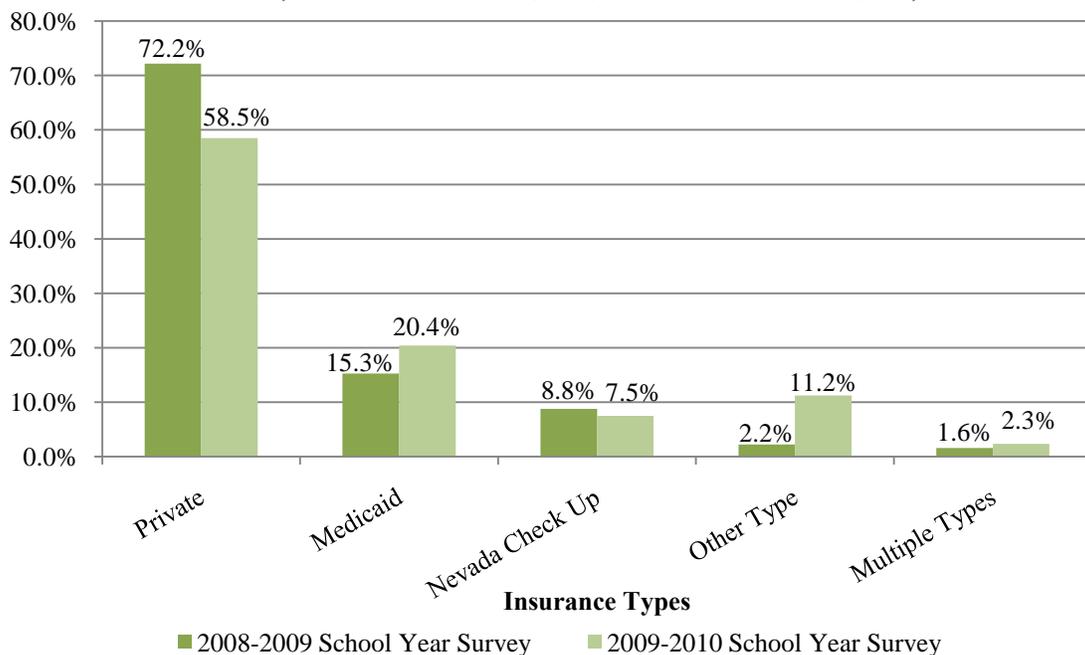
A correlation exists between children’s health insurance status access to health care services. Research indicates that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes than insured children. For example, uninsured children were nearly ten times as likely as insured children to have an unmet health need (Robert Wood Johnson Foundation, 2005). Nevada has been ranked the second highest in the country among uninsured children not receiving any care, at 43.4 percent of children (Robert Wood Johnson Foundation, 2005).

In this study, participants were asked whether or not their child had health insurance. Approximately 81.6 percent of parents surveyed indicated that their child had some type of health insurance coverage, while 17.8 percent of participants stated their child had no coverage. These percentages are nearly identical to percentages found in baseline data. Of the children who had health insurance, a majority of parents indicated that their child (58.5 percent) had private health insurance coverage, while 27.9 percent of children had public health insurance (either

Medicaid or Nevada Check Up). These percentages are considerably different from baseline data percentages, where 72.2 percent of respondents indicated their child had private health insurance and 24.1 percent had public health insurance.

Approximately 11.2 percent of respondents indicated that their child had some “other” type of health insurance not listed on the survey questionnaire. These “other” types of insurance ranged from coverage provided through the military or a Native American reservation, or were unclear responses that were difficult to recode into one of the survey categories. It is possible that some of these “other” types of insurance could indeed be added to the private or public survey categories. In addition, 2.3 percent of respondents selected multiple types of health insurance for their children, which are categorized as “multiple” in Figure 3.1. The majority of these responses specified that their child had both Medicaid and a private form of health insurance, or Medicaid and Nevada Check Up.

**Figure 3.1: Survey Responses Concerning Types of Health Insurance Covering Children**  
 ("2008-2009" *n* = 8,668; "2009-2010" *n* = 7,459)

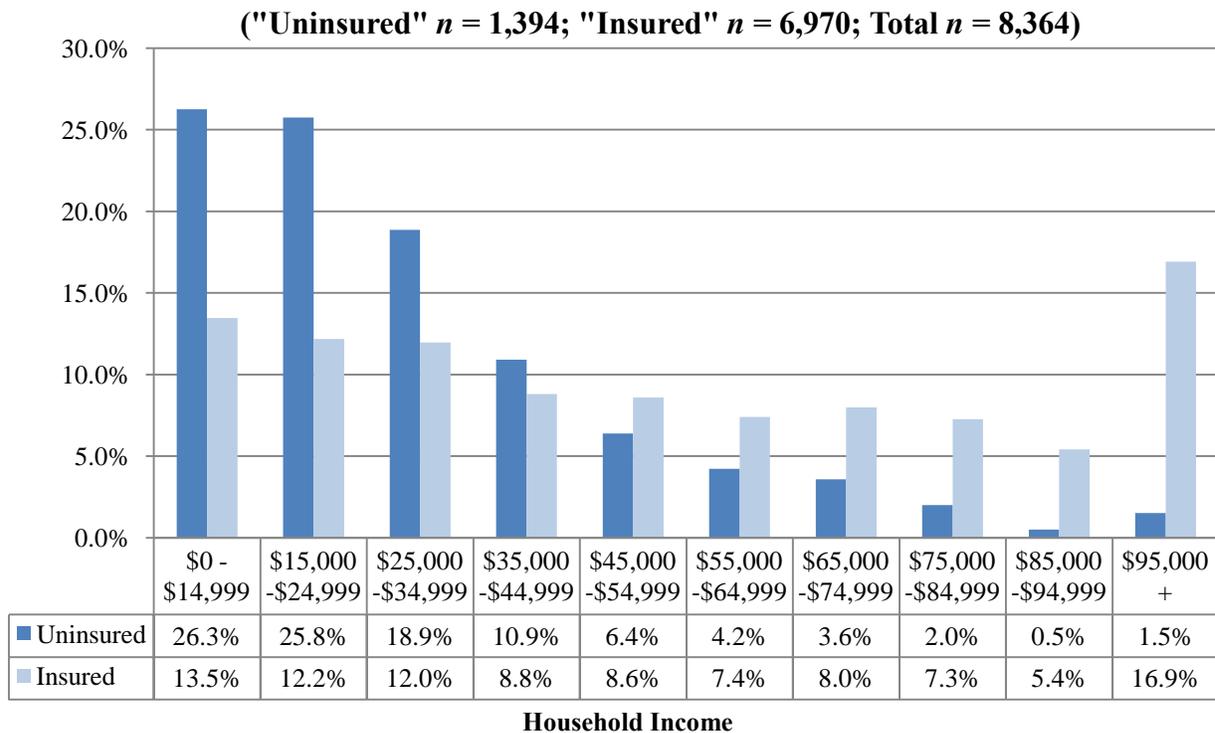


The above statistics are similar to national trends in children’s health insurance coverage, although there are some differences in the percentage of children insured by public programs. A recent study by the Kaiser Family Foundation (2008) found that more than 31.2 percent of children in the United States are covered by public health insurance, while this study indicates that 27.9 percent of children entering kindergarten are covered by public health insurance. The survey sample percentage may be reflective of greater barriers to enrollment in Nevada’s public health insurance programs.

Not surprisingly, children from families with a lower household income are more likely to be uninsured (see Figure 2.2). Over 25.0 percent of children living in households with an annual

income of less than \$25,000 have no health insurance, similar to baseline data, while 2.0 percent or less of children in households with income of \$75,000 or more have no health insurance. This correlation between income and insurance status reflects the lack of both access to and affordability of private health insurance options for lower- and middle-income families. The same Kaiser Family Foundation (2009) study found that of those lower- and middle-income families that had access to private health insurance coverage, only 19 percent could afford the premiums.

**Figure 3.2: Annual Household Income by Child's Insurance Status**



\* These findings are significant at  $p=.000$ .

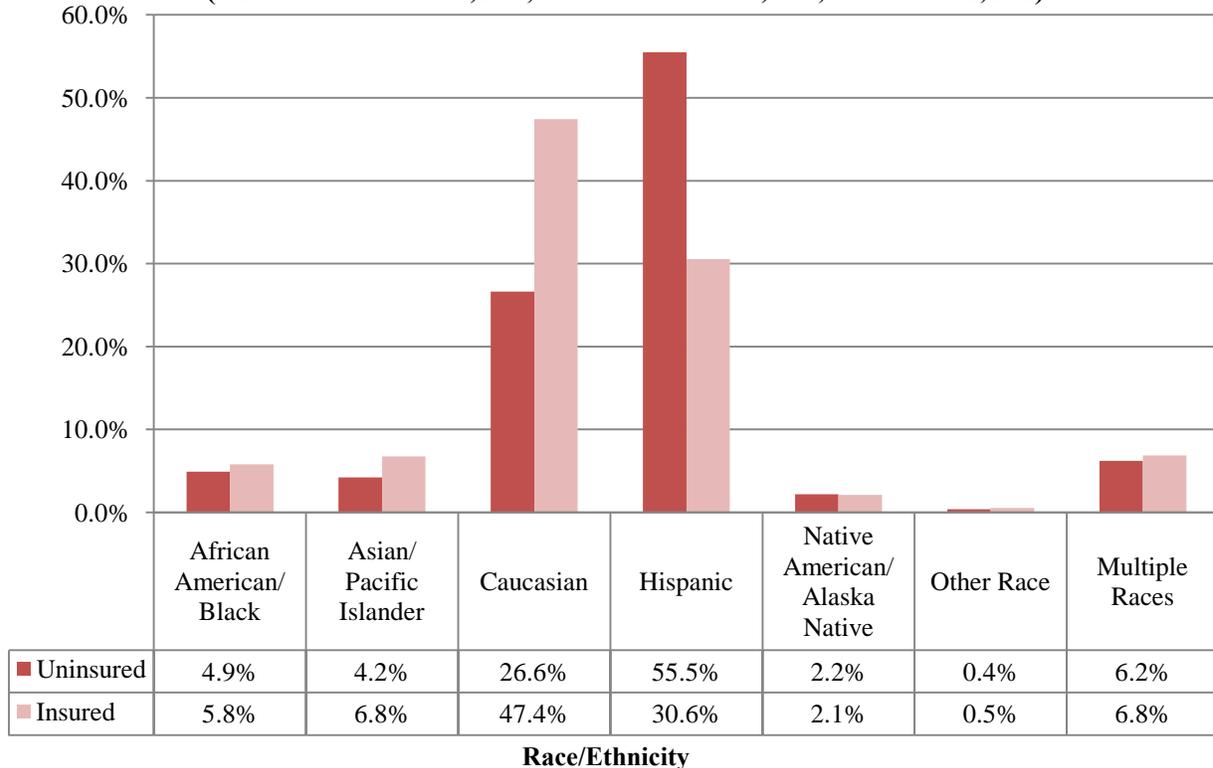
\*\* Percentages are calculated out of the number within each insurance category.

Figure 3.2, detailing the relationship between race/ethnicity and insurance status, shows that the majority of children who are uninsured are Hispanic (55.5 percent), followed by Caucasian children (26.6 percent). Compared to baseline data, the percentage of Hispanic respondents with no insurance has decreased about 3 percentage points, while the percentage of uninsured Caucasian respondents has increased about 4 percentage points. Research indicates that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Robert Wood Johnson Foundation, 2005). In Nevada and other states with a relatively large percentage of Hispanic immigrants, the rates of uninsured children are typically even higher. For instance, U.S. Census Bureau data estimate that approximately 30.7 percent of Hispanics across the country are uninsured (DeNavas-Walt et al., 2008). Although many uninsured Hispanic children that are part of immigrant families are eligible for

public health insurance, barriers to enrollment continue to impede these children from obtaining insurance coverage.

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

("Uninsured" *n* = 1,566; "Insured" *n* = 7,262; Total *n* = 8,828)



\* These findings are significant at  $p=0.000$ .

\*\* Percentages are calculated out of the number within each insurance category.

### ACCESS TO HEALTHCARE AND COMPLIANCE

Barriers to accessing health care are those structural, procedural, or situational mechanisms that hamper children's ability to receive health care services. When asked about accessing health care for their child, 79.6 percent of survey respondents indicated that they had not experienced barriers. However, 20.4 percent of participating parents had experienced at least one barrier. The majority of these respondents had difficulty due to either a lack of insurance or a lack of funds for health care services.

Most parents of uninsured children cannot afford to pay the high out-of-pocket costs charged for medical services. A recent report examining uninsured families found that financial barriers were less likely to be an issue for lower-income families with an insured child or children (Kaiser Family Foundation 2009). Even if children are covered by health insurance, other financial barriers such as high co-pays or premiums are likely to impede children's access to health care.

A combination of these financial barriers may result in many parents foregoing necessary medical care for their children.

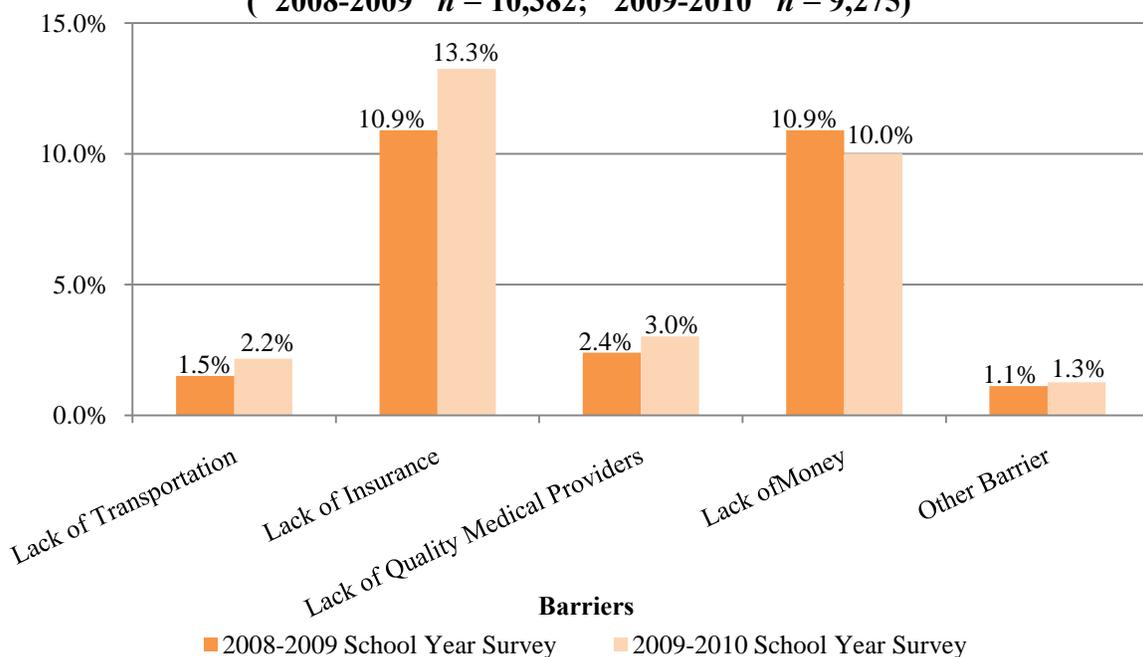
Responses in the “other” category for this question included: not having adequate insurance coverage, wait times for medical appointments, and language barrier problems. This category was not mutually exclusive, meaning that respondents could indicate multiple barriers.

Of all respondents experiencing one or more barriers to accessing health care, a disproportionate percentage were Hispanic, at 40.3 percent compared to 35.1 percent of Hispanics in the overall survey sample. Conversely, 38.9 percent of Caucasians experienced a barrier, compared to 43.5 percent of Caucasians in the overall sample.

Interestingly, more respondents with health insurance reported a barrier than did respondents without health insurance (51 percent versus 49 percent). This may be because, while having health insurance may improve one’s ability to obtain health care, it also can contribute to unique access barriers, such as identifying medical providers that accept a particular insurance plan, or submitting necessary paperwork for coverage. In addition, 44.7 percent of respondents reporting a barrier had an annual household income of less than \$25,000, and 62.2 percent of such respondents had a household income of less than \$35,000.

Please note that this question was the second of the two questions that varied between the English and Spanish versions of the survey. The response choice “lack of money” was not available on the Spanish survey, but was available on the English version. Therefore, the overall distribution of types of barriers shown in Figure 4.1 may be slightly skewed.

**Figure 4.1: Survey Responses Concerning Types of Barriers When Accessing Health Care for Child**  
 (“2008-2009” n = 10,382; “2009-2010” n = 9,275)

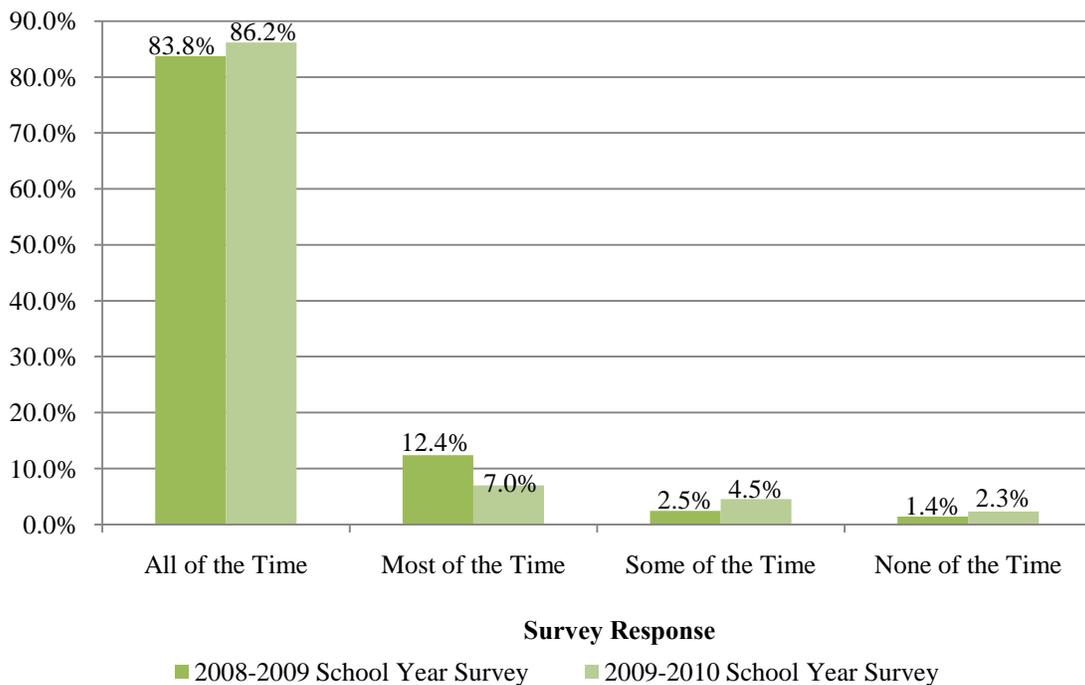


\* Please note that the choice “Lack of Money” was not available on the Spanish version of the 2009-2010 survey.

Parents were also asked if they were generally able to follow the recommendations provided by their child’s doctor. The majority (86.2 percent) of respondents indicated that they followed their child’s doctor’s recommendations all of the time. Only 2.3 percent of respondents reported that they followed their child’s doctor’s orders ‘none of the time’. Compared to baseline data, the percentage of respondents following doctor’s recommendations all of the time increased by about 2 percentage points, but the percentage never following recommendations also increased by 1 percentage point.

If parents indicated anything other than “all of the time” in response to this question, they were asked to list any reasons for their inability to comply with the doctor’s recommendations. The most frequently listed reasons concerned financial barriers, such as not being able to afford the prescribed care plans because of lack of insurance or inadequate income. Other reasons included various accessibility issues, including inconvenient scheduling of appointments and treatments or a lack of adequate transportation. The remaining responses indicated a lack of trust in medical providers, forgetting to administer medications, a feeling that the parent knew best for caring for the child, or the belief that the child no longer needed the care plan because he or she was feeling better.

**Figure 4.2: Survey Responses Concerning Ability to Follow Doctor's Recommendations for Child's Care**  
 ("2008-2009" n = 10,674; "2009-2010" n = 9,263)



**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 screening, and child well visits. Having access to routine medical check-ups is one key indicator that contributes

to a child's health and well-being. Children without health insurance are more likely to miss out on routine care than insured children. Children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Shi, et al., 1999).

Having access to regular primary care services, or a medical home, is another key indicator of children's overall health status. Primary care providers, which include physicians, physician's assistants, and nurses in general practice, offer routine personalized medical care to children. They provide a medical home where children can get basic care services, such as annual check-ups. Children that have access to a regular primary care provider who is in charge of coordinating and organizing their care tend to have a better health status than children without access to a primary care provider (Starfield, Shi & Macinko, 2005).

Survey results indicate 83.7 percent of kindergarteners had at least one routine check-up in the twelve months prior to the date of the survey. Similarly, 80.5 percent of kindergarteners have a primary care provider for their health care needs. Both of these percentages are similar to the percentages found in baseline data.

**Figure 5.1: Child's Routine Check-Ups and Presence of Primary Care Provider**  
 ("Check-Up" *n* = 9,411; "Primary Care Provider" *n* = 9,398)

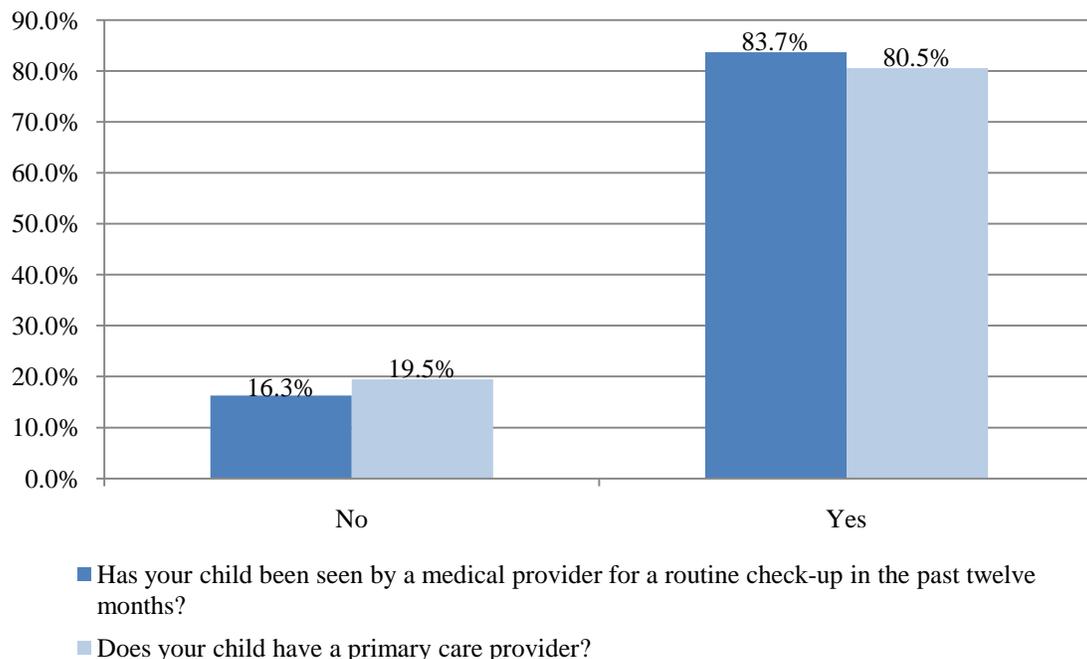
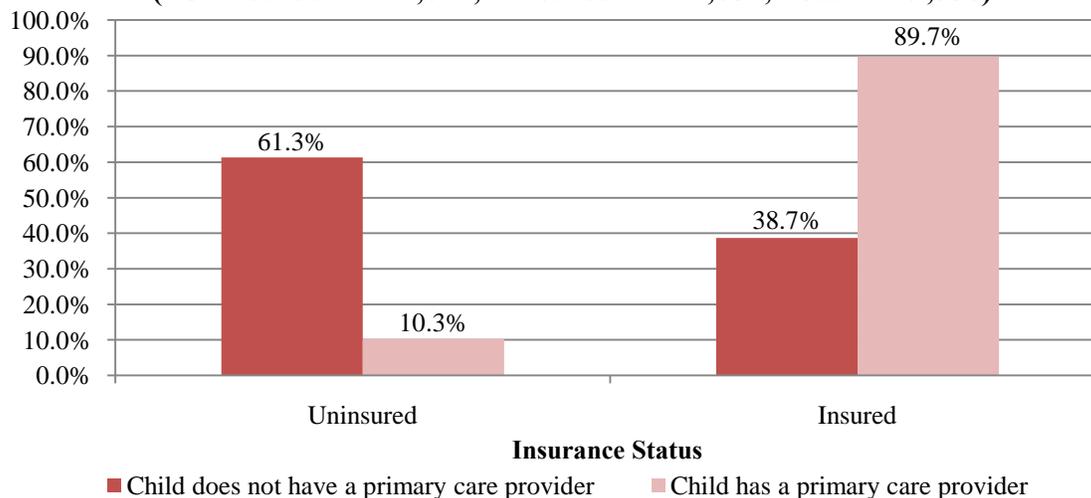


Figure 4.2 provides detail on insurance status and primary care providers. Approximately 89.7 percent of children with health care insurance also have a primary care provider, while only 10.3 percent of children without insurance have a primary care provider.

**Figure 5.2: Presence of Primary Care Provider by Child's Insurance Status**  
 ("Uninsured"  $n = 1,672$ ; "Insured"  $n = 7,684$ ; Total  $n = 9,356$ )

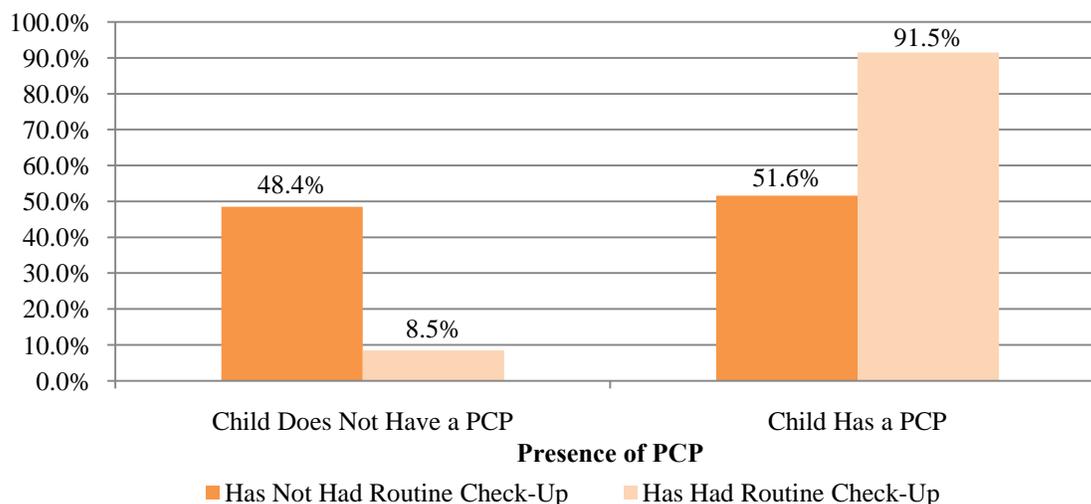


\*These findings are statistically significant at  $p=.000$ .

\*\*Percentages are calculated out of the number within each insurance category.

Survey results also indicate disparities in health status between insured and uninsured children. For example, Figure 4.3 shows the proportion of children with or without a primary care provider by whether they have received a routine check-up in the past twelve months. Of the children that have a primary care provider, 91.5 percent had a routine check-up in the last year. Of the children without a primary care provider, nearly half (48.4 percent) have not had a routine check-up in the last year. These percentages are similar to percentages found in baseline data.

**Figure 5.3: Child's Routine Check-Up Status by Presence of Primary Care Provider (PCP)**  
 ("No PCP"  $n = 1,798$ ; "Has PCP"  $n = 7,527$ ; Total  $n = 9,325$ )



\*These findings are statistically significant at  $p=.000$ .

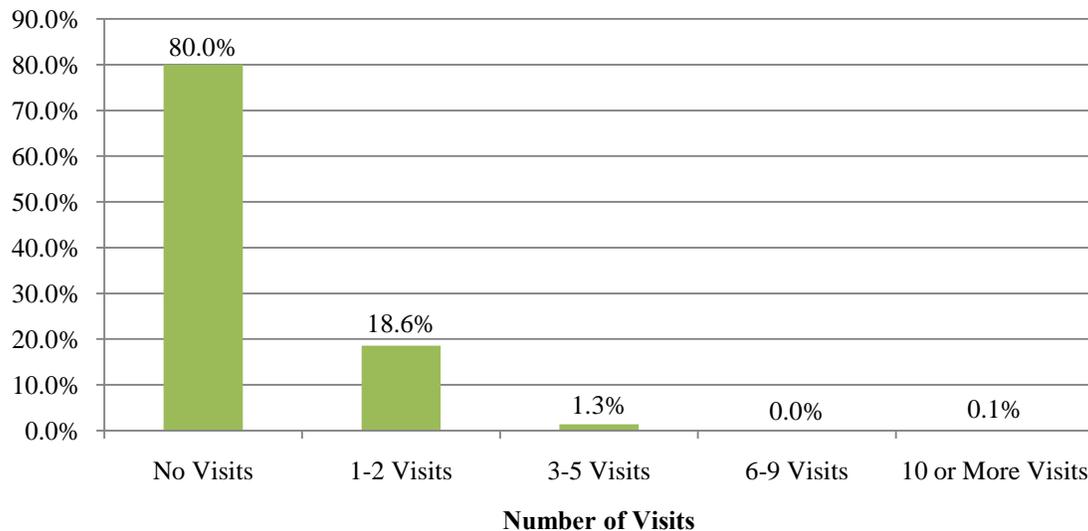
\*\*Percentages are calculated out of the number within each PCP category.

## CARE FOR ILLNESS OR INJURY

In recent years, a growing number of uninsured children with minor, non-life-threatening conditions have accessed health care services in emergency care facilities. This upward trend is likely related to an expanding uninsured population and higher costs for health care. Most uninsured children come from lower-income families that cannot afford to pay the high costs for medical care. These families are often forced to use hospital emergency rooms (ERs) or other urgent care facilities for non-life-threatening conditions.

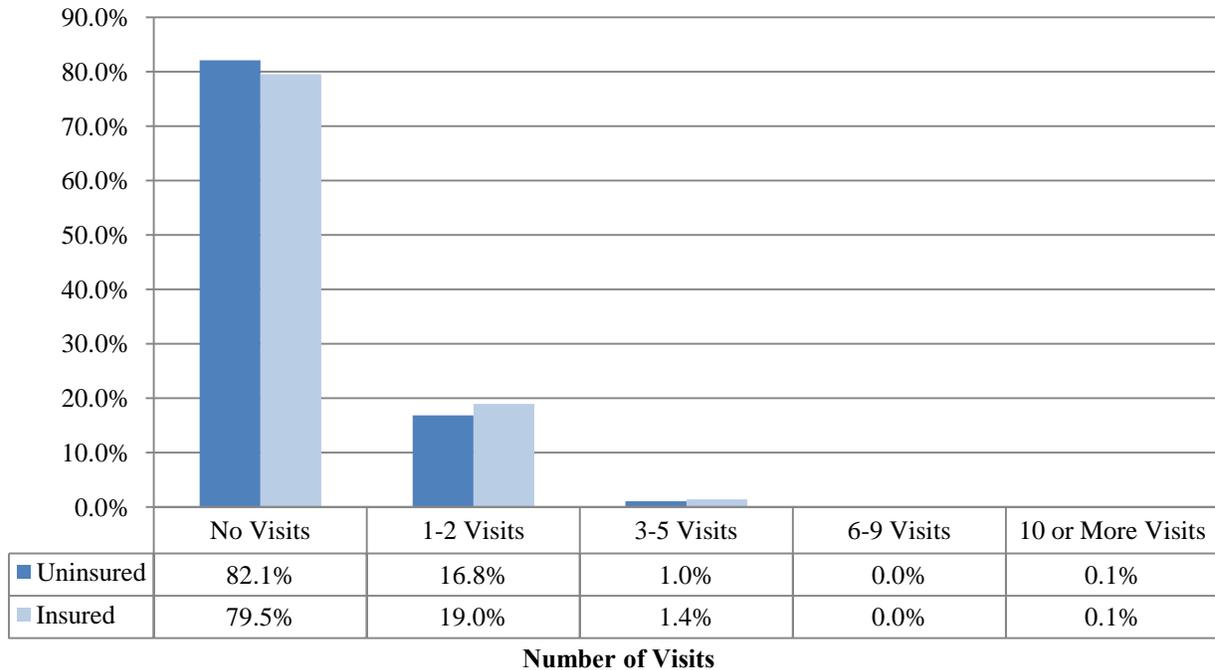
Parents were asked about the frequency in the past twelve months of ER visits for non-emergency care for their child. Approximately 20.0 percent of respondents indicated they had visited an ER for a non-life threatening illness or injury at least once in the past year, a nearly 5 percentage point decrease from baseline data (see Figure 5.1). While 18.6 percent of respondents had used the ER one or two times in the past year, approximately 1.3 percent of respondents had used the ER between three and five times. However, insurance status was not a significant indicator of usage of an ER. Figure 5.2 shows the percentage of children that had been to an ER by whether or not they have health insurance. For both insured and uninsured groups, the majority of children had not been to an ER for non-emergencies in the past 12 months.

**Figure 6.1: Number of Emergency Room Visits for Non-Life-Threatening Care**  
(n = 9,428)



\*Percentages are calculated out of the number within each insurance category.

**Figure 6.2: Number of Emergency Room Visits for Non-Life-Threatening Care by Child's Insurance Status**  
 ("Uninsured"  $n = 1,678$ ; "Insured"  $n = 7,701$ ; Total  $n = 9,379$ )



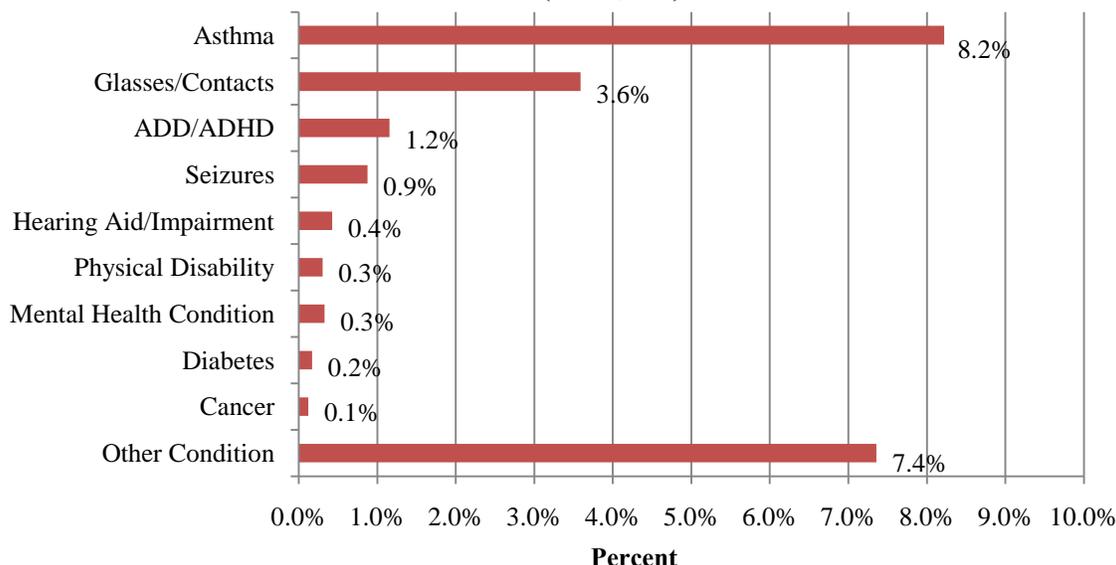
## MEDICAL CONDITIONS

Many of Nevada's children have special medical conditions. Treatment for such children is often expensive and requires a team of medical care providers, led by a primary care physician, devoted to the treatment and maintenance of such conditions. Thus, health insurance coverage is vital for children with special health conditions, as it ensures that these children have access to ongoing care and treatment. Generally, health insurance serves as a safeguard for parents and families against the higher costs necessary for the treatment and maintenance of special medical conditions. According to this year's survey results, 19.6 percent of parents indicated that their child had a medical condition requiring special treatment.

As Figure 6.1 illustrates below, 8.2 percent of respondents reported that their child had asthma. A study released by the University of Rochester Medical Center (Halterman et al., 2008) examining the health insurance status of American children with asthma found that 13 percent of children with asthma (759,000) were uninsured at some time during the year. These children were more likely than insured children to be at risk for severe complications and unnecessary hospitalizations.

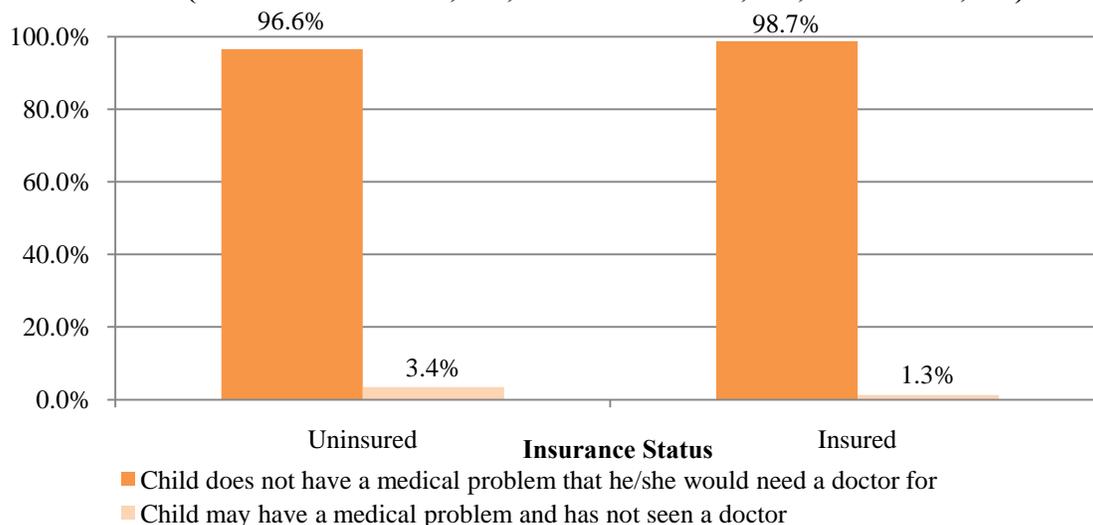
Approximately 7.4 percent indicated an "other" health condition not listed on the survey. Such "other" conditions included allergies, skin ailments such as eczema, heart murmurs, speech problems, and autism. Other common health conditions included use of glasses or contacts (3.6 percent of respondents) and ADD or ADHD (1.2 percent of respondents).

**Figure 7.1: Types of Medical Conditions in Children**  
(n = 8,222)



Respondents were also asked if they thought their child had a medical condition that he or she has not seen a doctor for. The majority of parents reported that this was not an issue, with only 3.4 percent of uninsured or 1.3 percent of insured respondents indicating that their child may have a medical problem that could require a doctor's care. When considering only those respondents who indicated their child may have an untreated medical condition, 36.8 percent of the parents were uninsured, a figure comparable to baseline data.

**Figure 7.2: Other Medical Problems that May Require a Doctor by Child's Insurance Status**  
("Uninsured" n = 1,658; "Insured" n = 7,702; Total n = 9,360)



\*These findings are statistically significant at p=.000.

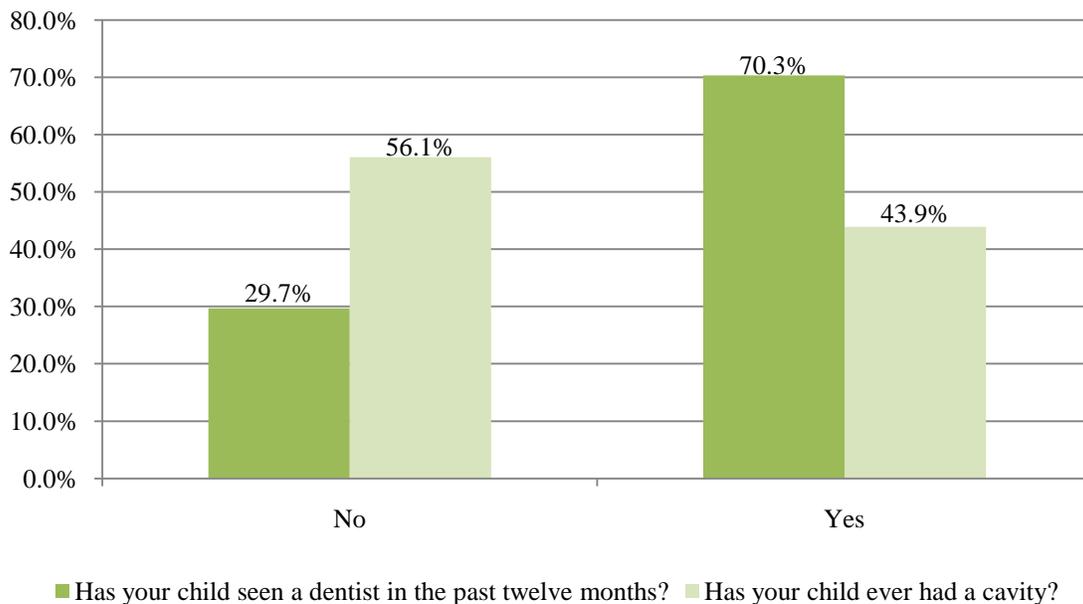
\*\*Percentages are calculated out of the number within each insurance category.

## DENTAL CARE

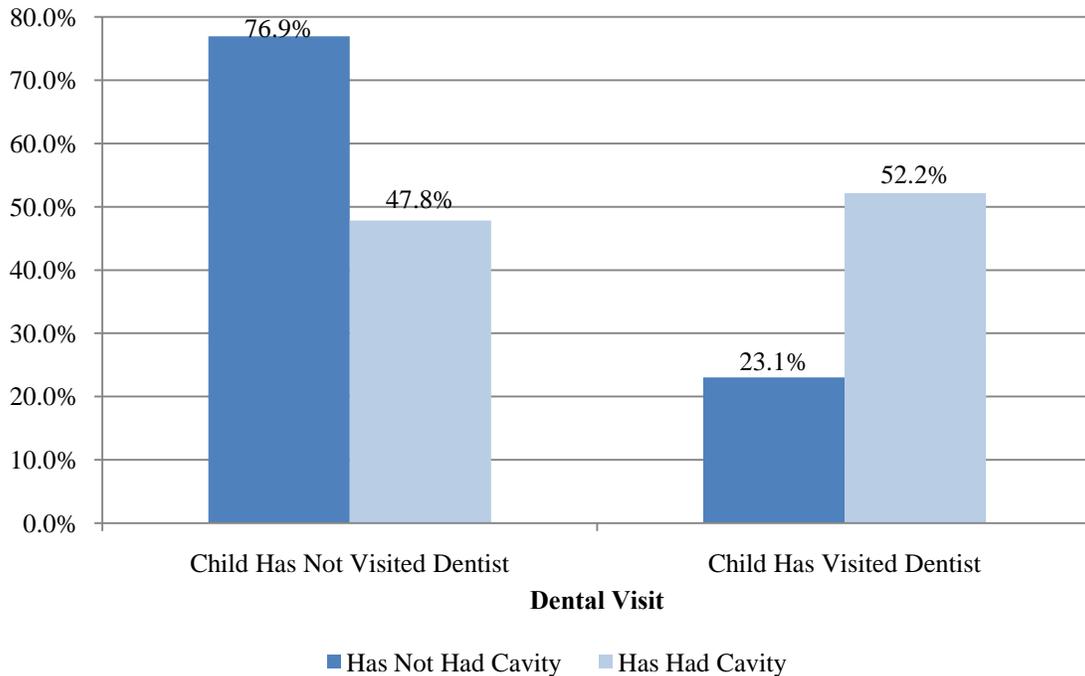
Routine dental care is also important to children's health and daily functioning. Children without access to regular dental care are more likely to experience dental problems, such as dental cavities and tooth abscesses. These children also miss more days of school than children without dental problems. Research also indicates that uninsured children are much more likely to have unmet dental needs. One study found that 2 percent of insured children had an unmet dental need whereas 8 percent of uninsured children had an unmet dental need (Child Trends, 2004). Additionally, uninsured children are 1.5 times more likely to not have received preventative care in the last year and 3 times more likely to have an unmet dental need than insured children (Liu et al., 2007).

To prevent oral health problems, it is generally recommended that children receive regular dental check-ups every six months to a year. In this survey, 29.7 percent of survey respondents indicated that their kindergartener had not seen a dentist in the past twelve months, a decrease of nearly 3 percentage points from baseline data. Nearly 44 percent of kindergarteners in this sample have already had a cavity, while 56 percent of kindergarteners have not. Interestingly, more children that have visited a dentist in the past year have had a cavity (52.2 percent), and more children that have not visited a dentist have not had a cavity (76.9 percent). This is likely because visiting a dentist alerts parents of any cavities a child may have, and so the children who have not visited a dentist may actually have undiagnosed cavities.

**Figure 8.1: Child's Dental Visit and Presence of Cavities**  
("Dentist"  $n = 9,449$ ; "Cavity"  $n = 9,238$ )



**Figure 8.2: Presence of Cavities by Child's Dental Visit**  
 ("No Dentist" *n* = 2,607; "Dentist" *n* = 6,600; Total *n* = 9,207)



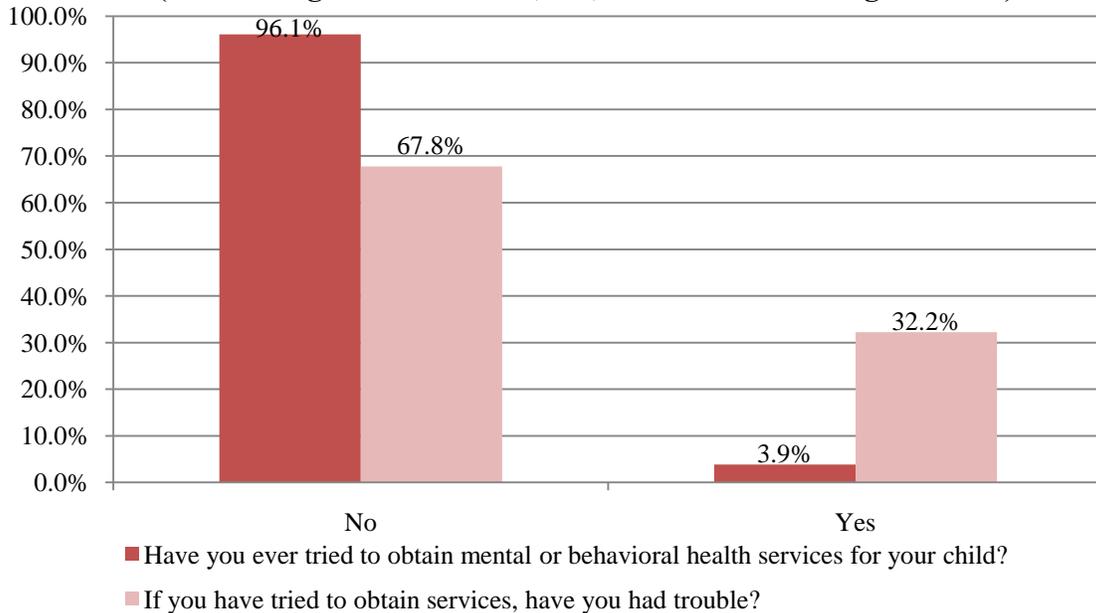
## MENTAL HEALTH

Many of Nevada's children have mental health conditions that require specialized treatment from mental health providers. 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. 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 (Child Trends, 2004).

The survey results indicated only 3.9 percent of respondents have tried to access mental health services for their children, a percentage similar to baseline data. Of the respondents who have tried to access these services for their child, nearly one third (32.2 percent) reported having trouble obtaining the services. In addition, of those who have tried to access services, nearly all (89.3 percent) had health insurance, while only 10.7 percent of respondents without health insurance had ever tried to obtain mental health services. A disproportionate share of respondents at the lowest household income range (\$0-\$14,999) tended to have tried to access services (21.3 percent versus 15.7 percent of respondents in this income range in the overall sample), though these figures are not statistically significant. Other income ranges were generally comparable to the overall sample. The race/ethnicity distribution of respondents trying to access mental health services was comparable to the overall distribution in the sample.

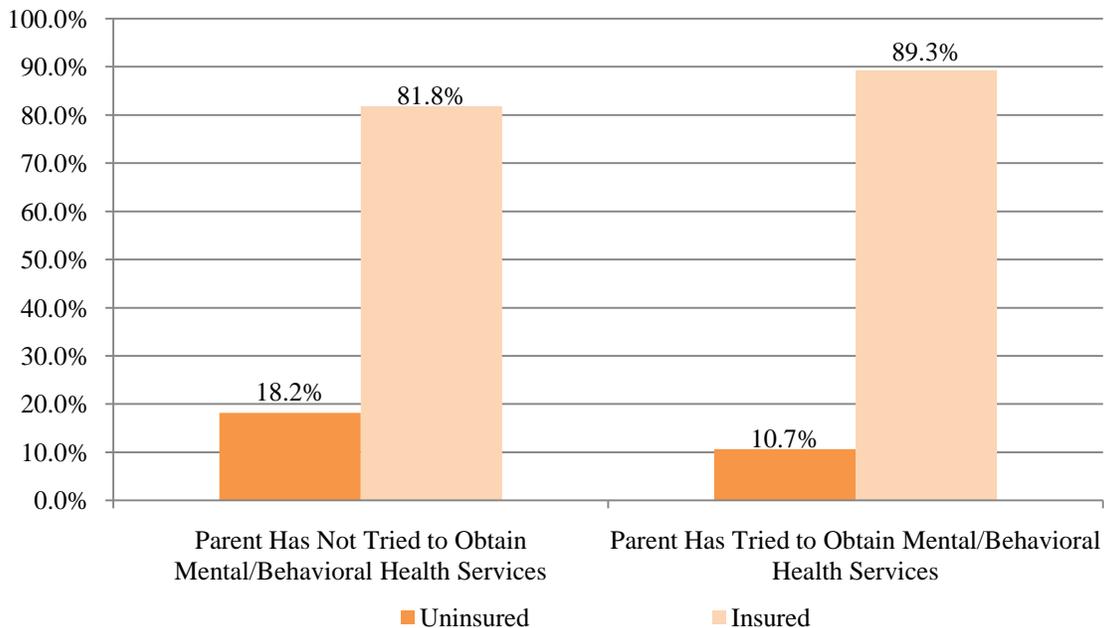
**Figure 9.1: Obtaining Mental or Behavioral Health Services for Child and Trouble Related to Obtaining Services**

("Obtaining Services" n = 9,444; "Trouble Obtaining" n = 324)



**Figure 9.2: Obtaining Mental or Behavioral Health Services for Child by Child's Insurance Status**

("Has Not Tried to Obtain" n = 9,030; "Has Tried to Obtain" n = 365; Total n = 9,395)

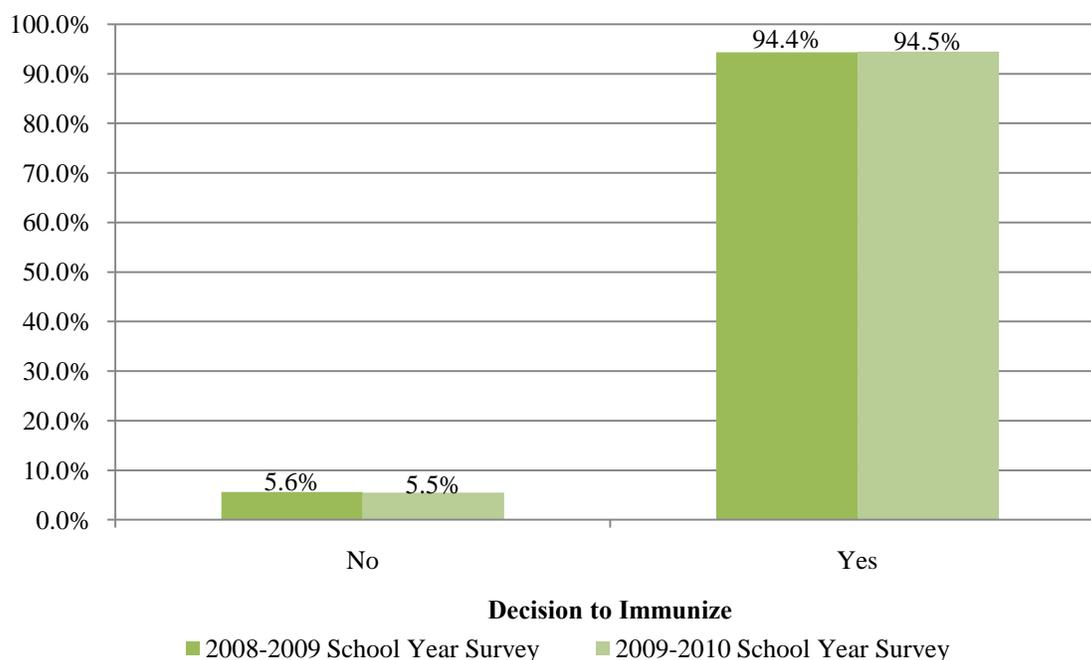


## IMMUNIZATIONS

Immunizing children in Nevada is important to preventing the spread of certain childhood diseases and avoiding public health outbreaks. According to the Centers for Disease Control and Prevention (CDC) (2006), vaccinations are particularly important for children, as they have lower disease-fighting immunity than adults and may be more susceptible to complications. Getting children immunized also protects the community by preventing the spread of infectious diseases.

It seems that most of Nevada's parents understand the importance of immunizing their children against diseases. Approximately 94.5 percent of parents would still immunize their child even if immunizations were not required by law, a rate nearly identical to baseline data. However, 508 parents (5.5 percent) indicated that they would not have their child immunized if it were not required by law. The demographics for these respondents were very similar to the demographics for the entire sample. However, 54.9 percent of parents responding that they would not immunize their child were Caucasian, compared to 43.1 percent of Caucasian respondents who would immunize their child. In the survey sample overall, 43.5 percent of respondents were Caucasian.

**Figure 10.1: Survey Responses Concerning Decision to Immunize if Immunizations Were Not Required**  
("2008-2009" *n* = 10,706; "2009-2010" *n* = 9,231)

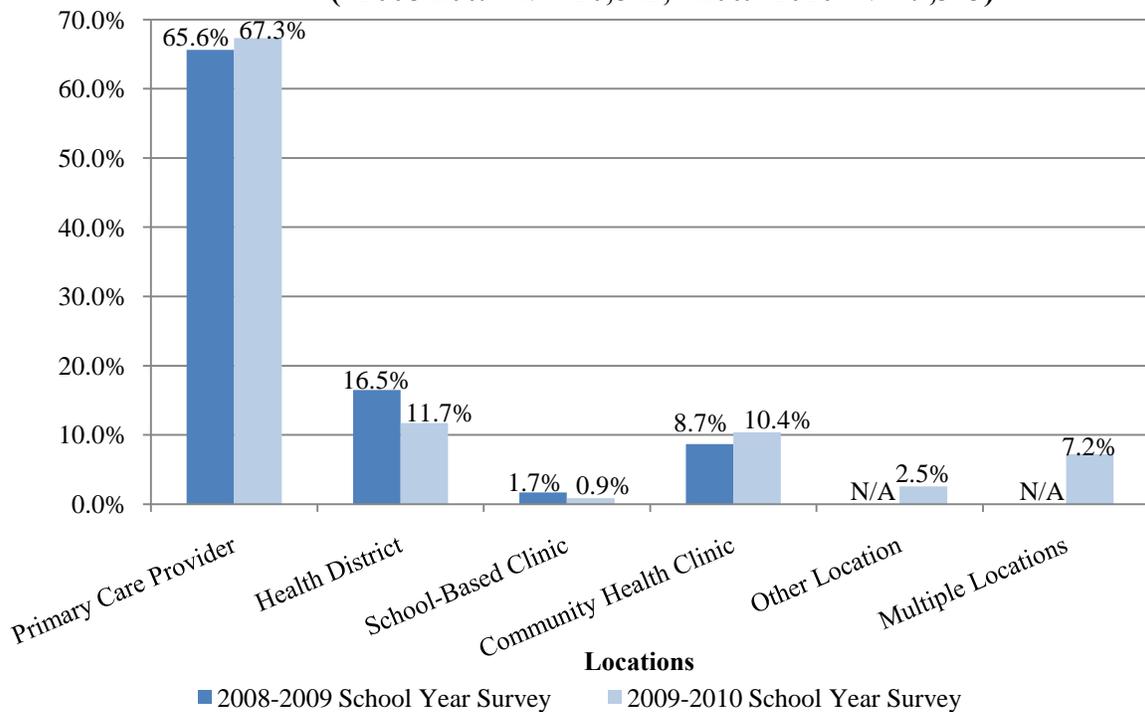


To ensure all children receive their immunizations on schedule, there is a broad array of organizations and clinics around Nevada that offer low-cost immunizations for children. Some common locations that offer immunizations for children include: primary care provider offices,

local health districts, school-based health clinics, and community health clinics. According to the results of this survey, a majority of children were immunized by a primary care provider (67.3 percent). Local health districts were the second most common place for children to get immunized (11.7 percent), followed by community health clinics (10.4 percent). Over 7 percent of respondents indicated multiple locations for immunizations, with the majority indicating their child had received immunizations from either a primary care provider and a local health district or a primary care provider and a community health clinic. In addition, 2.5 percent of respondents indicated that they go to some “other” location for immunizations. It is possible that some of these “other” types of locations could actually be one of the existing locations specified in Figure 9.2 below. Some respondents indicated that they chose not to immunize their child due to personal beliefs or based on doctor’s recommendations.

More parents seem to be utilizing community health clinics for immunizations in this sample as compared to baseline data (8.7 percent in baseline data). Fewer parents are going to local health districts; over 16 percent of respondents indicated going to a health district in baseline data.

**Figure 10.2: Survey Responses Concerning Immunization Locations**  
 (“2008-2009” *n* = 10,842; “2009-2010” *n* = 9,373)



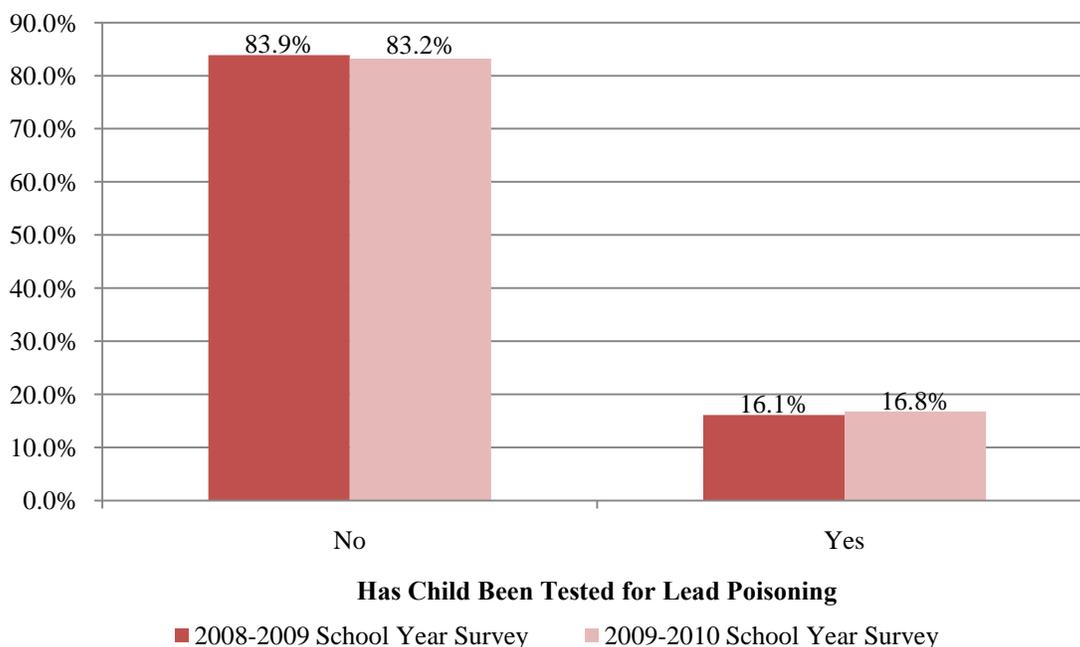
**LEAD SCREENING**

Screening for elevated blood lead levels is an important way to determine if Nevada’s children are exposed to lead, and to prevent or treat serious health complications caused by lead exposure. Testing for elevated blood lead levels enables health care practitioners and public health professionals both to treat exposed children and to track the source of the lead exposure. In an

effort to establish federal and state targets to control lead exposure, the Childhood Lead Poisoning Prevention Program (CLPPP) was established in Southern Nevada.

In the current study, parents were asked whether or not their child had been tested for lead poisoning. Only a small percentage of respondents (16.8 percent) indicated their child had been tested for lead poisoning. This percentage is only a slight increase from baseline data, where 16.1 percent of respondents indicated a lead screening had occurred. Continued efforts to encourage screening of children, particularly at 12 and 24 months of age, are needed to fully understand the level of lead exposure in Nevada.

**Figure 11.1: Survey Responses Concerning Lead Poisoning Tests**  
 ("2008-2009" *n* = 10,667; "2009-2010" *n* = 9,282)



## WEIGHT AND HEALTHY BEHAVIORS

Childhood obesity is a growing public health problem across the country. Epidemiologists have shown increases in children with Type II diabetes in recent years. Therefore, monitoring children’s weight has become an important tool for analyzing potential health problems. This survey asked parents to write in their child’s height and weight information. NICRP used this information to calculate a Body Mass Index (BMI) value for all children with valid height and weight responses. BMI values were calculated using the standard formula employed by the CDC and other health agencies:

$$BMI = [Weight / (Height * Height)] * 703$$

Many of the respondents left one or both of the height and weight questions blank, resulting in only 4,222 cases (44.4 percent of the entire sample) with a BMI value.

Once a BMI was calculated, it was assigned a weight status category based on CDC standards, which use a child’s age, gender, and BMI percentile to determine the child’s weight status. Table 11.1, below, outlines the BMI percentile ranges for each weight status category. Because some respondents left blank the questions for the child’s age or gender, the number of cases with a weight status category dropped to 4,026 (42.4 percent of the entire sample).

For the purpose of this study, NICRP used 10 different weight status formulas: one formula each for females age 4.0, 4.5, 5.0, 5.5, and 6.0; and one formula each for males age 4.0, 4.5, 5.0, 5.5, and 6.0. These age categories account for all but one of the cases in the sample that have a valid age, gender, height, and weight (the age for this case seems to be an outlier). Table 11.2 outlines the calculations used to determine weight status categories.

**Table 12.1: Weight Status Categories by BMI Percentile Ranges**

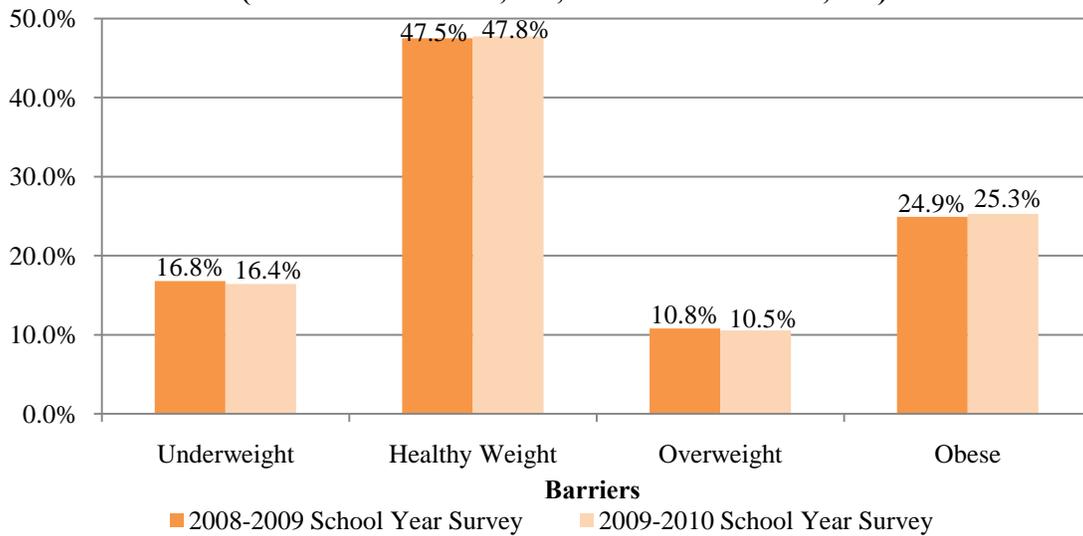
<b>Weight Status Category</b>	<b>BMI Percentile Range</b>
Underweight	BMI less than the 5 <sup>th</sup> percentile
Healthy Weight	BMI from the 5 <sup>th</sup> percentile to less than the 85 <sup>th</sup> percentile
Overweight	BMI from the 85 <sup>th</sup> percentile to less than the 95 <sup>th</sup>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

**Table 12.2: Weight Status Category Calculations Based on BMI Values**

Females				
Age	Weight Status Category			
	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				
Age	Weight Status Category			
	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

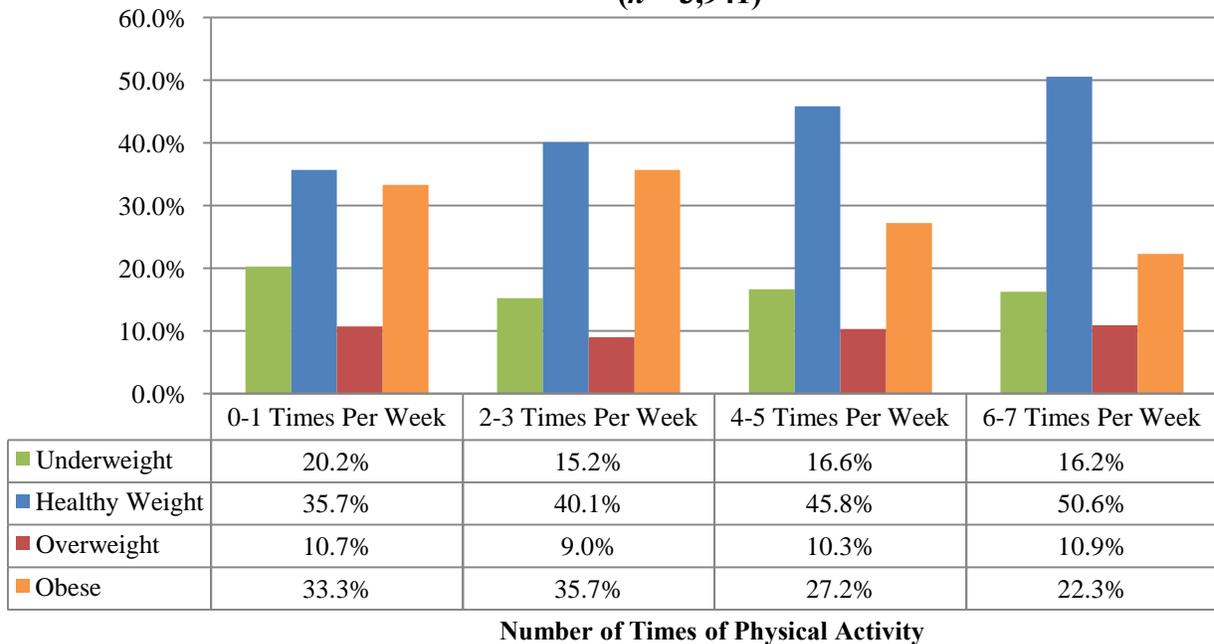
Nearly half (47.8 percent) of children entering kindergarten whose parents participated in this survey are of a healthy weight, a rate comparable to baseline data (see Figure 12.1). However, 10.5 percent of children are overweight, and over one quarter (25.3 percent) of children are considered obese given the reported data.

**Figure 12.1: Survey Results Concerning Child's Weight Status Category**  
 ("2008-2009" *n* = 3,667; "2009-2010" *n* = 4,026)



Parents were asked the number of times per week their child is physically active for at least thirty minutes. Figure 11.2 details the relationship between weight status category and number of times of physical activity. Generally, children that were physically active less often (1-2 times per week) were more likely to be underweight or obese and were less likely to be a healthy weight, as compared to children that were physically active throughout the week (6-7 times per week).

**Figure 12.2: Child's Weight Status Category by Number of Times Physically Active Per Week**  
 (*n* = 3,941)



\* These findings are significant at  $p=.000$

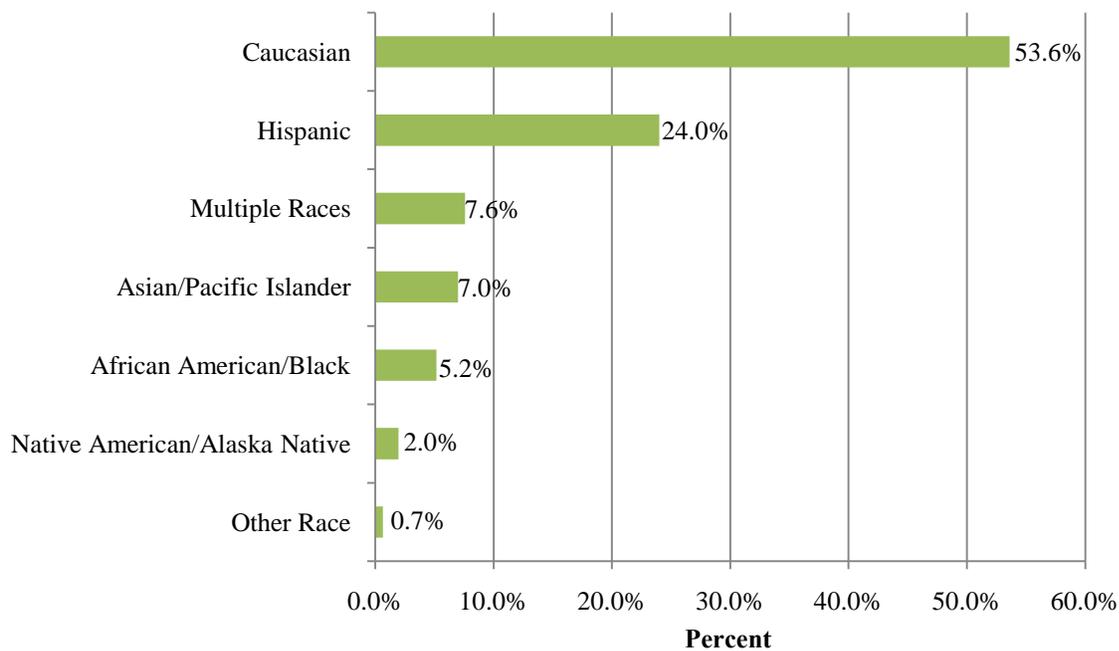
\*\* Percentages are calculated out of the total number in each physical activity category.

There were no significant differences between kindergarteners with an “obese” weight status category and the overall sample with regard to insurance status or annual household income. More male kindergarteners tended to have an “obese” weight status category (56.1 percent) compared to the overall percentage of males in the survey sample (49.8 percent).

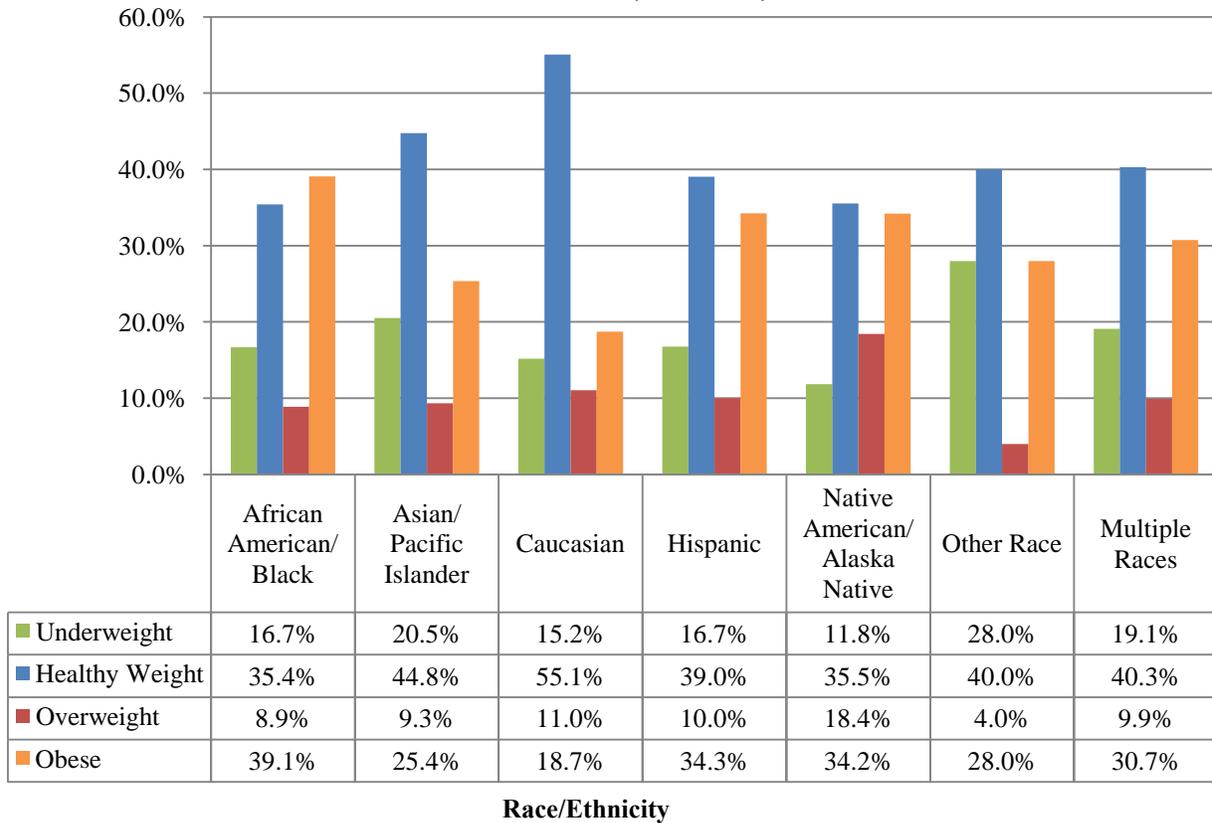
When comparing each child’s race/ethnicity with his or her BMI, we can see some differences in distributions across weight categories for each race/ethnicity group. It is important to note that the total number of participants included in this analysis is even fewer than those in the above statistics on valid BMI’s 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 entire survey sample, with a greater concentration of Caucasian participants eligible for this analysis and a smaller concentration of Hispanic participants eligible. Figure 11.3 illustrates the race/ethnicity data for children with a valid BMI.

African American/Black children had a greater percentage of children that were overweight (39.1 percent) than other weight status categories, while Native American/Alaska Native children were generally equally distributed between having a healthy weight (35.5 percent) and being overweight (34.2 percent). For Caucasian and Asian/Pacific Islander children, there were more children at a healthy weight than overweight. In addition, in comparing the overall percentages of the respondents that are overweight (10.5 percent) or obese (25.3 percent), almost all non-Caucasian children (with the exception of Asian/Pacific Islander children) are disproportionately represented in these categories. See Figure 11.4, below, for more detail.

**Figure 12.3: Race/Ethnicity of Participants with a Valid Body Mass Index (BMI)**  
(n = 3,990)



**Figure 12.4: Child's Weight Status Category by Child's Race/Ethnicity**  
(n = 3,795)



\* These findings are significant at p=.000.

\*\* Percentages are calculated out of the total number in each race/ethnicity category.

### SUMMARY OF SURVEY RESULTS BETWEEN SCHOOL YEAR SAMPLES

Table 13.1, below, outlines the percentage point differences between 2008-2009 school year survey responses and 2009-2010 school year survey responses for key indicators discussed in this report. Generally, the percentage of survey responses for key indicators remained consistent from the 2008-2009 school year to the 2009-2010 school year. Exceptions to this trend may include the percentage of respondents at the lowest income bracket (\$0-\$14,999), the percentage of kindergarteners covered by private health insurance, the percentage of respondents reporting that a lack of health insurance has been a barrier to accessing health care, and the percentage of kindergarteners with asthma.

**Table 13.1: Comparison of 2008-2009 and 2009-2010 Data for Select Survey Indicators**

Survey Indicator	2008-2009 (Baseline) (Percent)	2009-2010 (Year Two) (Percent)	Difference in Percentage Points
<i>Survey Participation by School District</i>			
Clark County	78.9	59.0	-19.9
Washoe County	8.8	17.6	8.8
Rural Counties	12.4	23.4	11.1
<i>Demographic Information</i>			
<i>Gender of Kindergartener</i>			
Male	50.2	49.8	-0.4
Female	49.8	50.2	0.4
<i>Race/Ethnicity of Kindergartener</i>			
African American/Black	5.9	5.7	-0.2
Asian/Pacific Islander	6.0	6.3	0.3
Caucasian	40.1	43.5	3.5
Hispanic	33.4	35.1	1.7
Native American/Alaska Native	0.9	2.1	1.2
Other Race	0.4	0.5	0.1
Multiple Races	13.4	6.7	-6.7
<i>Annual Household Income of Survey Respondent</i>			
\$0-\$14,999	12.9	15.7	2.8
\$15,000-\$24,000	14.3	14.5	0.2
\$25,000-\$34,999	13.8	13.1	-0.7
\$35,000-\$44,999	9.8	9.2	-0.6
\$45,000-\$54,000	9.1	8.2	-0.9
\$55,000-\$64,999	7.5	6.9	-0.6
\$65,000-\$74,999	-	7.2	-
\$75,000-\$84,999	-	6.4	-
\$85,000-94,999	-	4.6	-
\$95,000 +	-	14.3	-
<i>Health Insurance Status and Access to Health Care</i>			
Kindergartener Does Not Have Health Insurance	18.4	17.8	-0.6
Kindergartener Does Not Have a Primary Care Provider	21.0	19.5	-1.5
<i>Type of Insurance Covering Kindergartener</i>			
Private	72.2	58.5	-13.7
Medicaid	15.3	20.4	5.1
Nevada Check-Up	8.8	7.5	-1.3
Other	2.2	11.2	9.0
Multiple Types	1.6	2.3	0.7

**Table 13.1 continued**

Survey Indicator	2008-2009 (Baseline) (Percent)	2009-2010 (Year Two) (Percent)	Difference in Percentage Points
<b>Types of Barriers Experienced When Trying to Access Healthcare</b>			
Lack of Transportation	1.5	2.2	0.7
Lack of Insurance	10.9	13.3	2.4
Lack of Quality Medical Providers	2.4	3.0	0.6
Lack of Money/Financial Resources	10.9	10.0	-0.9
Other Barriers	1.1	1.3	0.2
<b>Respondent Has Experienced Difficulties When Attempting to Access Mental Health Services for Kindergartener</b>			
	34.5	32.2	-2.3
<b>Annual Household Income of Uninsured Kindergarteners</b>			
\$0-\$14,999	26.4	26.3	-0.1
\$15,000-\$24,999	26.1	25.8	-0.3
\$25,000-\$34,999	19.3	18.9	-0.4
\$35,000-\$44,999	11.5	10.9	-0.6
\$45,000-\$54,999	7.1	6.4	-0.7
\$55,000-\$64,999	3.8	4.2	0.4
\$65,000-\$74,999	-	3.6	-
\$75,000-\$84,999	-	2.0	-
\$85,000-94,999	-	0.5	-
\$95,000 +	-	1.5	-
<b>Race/Ethnicity of Uninsured Kindergarteners</b>			
African American/Black	3.8	4.9	1.1
Asian/Pacific Islander	3.9	4.2	0.3
Caucasian	22.7	26.6	3.9
Hispanic	58.6	55.5	-3.1
Native American/Alaska Native	1.2	2.2	1.0
Other Race	0.5	0.4	-0.1
Multiple Races	9.3	6.2	-3.1
<b>Routine Care and Health Status of Kindergartener</b>			
<b>Kindergartener Has Not Had Routine Check-Up In Past Year</b>			
	17.1	16.3	-0.8
<b>Kindergartener Has Not Visited Dentist in Past Year</b>			
	32.5	29.7	-2.8
<b>Types of Medical Conditions Seen in Kindergarteners</b>			
Asthma	4.8	8.2	3.4
Glasses/Contacts	2.1	3.6	1.5
ADD/ADHD	0.7	1.2	0.5
Seizures	0.2	0.9	0.7
Hearing Aid/Impairment	0.5	0.4	-0.1
Physical Disability	0.2	0.3	0.1
Mental Health Condition	0.2	0.3	0.1
Diabetes	0.1	0.2	0.1
Cancer	0.04	0.1	0.1
Other Condition	5.1	7.4	2.3

**Table 13.1 continued**

Survey Indicator	2008-2009 (Baseline) (Percent)	2009-2010 (Year Two) (Percent)	Difference in Percentage Points
Kindergartener with No Insurance Has a Possible Undiagnosed Medical Condition	2.2	3.4	1.2
Kindergartener's Weight Status			
Underweight	16.8	16.4	-0.4
Healthy Weight	47.5	47.8	0.3
Overweight	10.8	10.5	-0.3
Obese	24.9	25.3	0.4
Kindergartener Has Not Been Tested for Lead Poisoning	83.9	83.2	-0.7
<i>Immunization Information</i>			
Respondent Would Not Immunize Kindergartener if it Was Not Required	5.6	5.5	-0.1
<i>Immunization Locations Used by Respondent</i>			
Primary Care Provider	65.6	67.3	1.7
Health District	16.5	11.7	-4.8
School-based Clinic	1.7	0.9	-0.8
Community Health Clinic	8.7	10.4	1.7
Other Location	7.5	2.5	-5.0
Multiple Locations	-	7.2	-

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## **APPENDIX A: SURVEY INSTRUMENT**

# 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 District. 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 will have a child in kindergarten. All information from this survey will be used to discuss children’s health on a group level. Your child’s name will **never** be connected to your responses in any way or known by the researchers. **All information in this survey is confidential.***

<p><b>Child’s Age</b> _____</p> <p><b>Elementary School Name:</b> _____</p> <p><b>Child’s Gender:</b> Male Female</p> <p><b>Weight of Child:</b> _____ lbs.</p> <p><b>Child’s Height:</b> _____ ft. _____ in. (12in = 1ft)</p> <p><b>Total number of children</b> in your household: (ages 0-17) _____</p> <p><b>Total number of adults</b> in your household: (ages 18+) _____</p>	<p><b>Annual Household Income (check one)</b></p> <p><input type="checkbox"/> \$0 -\$14,999</p> <p><input type="checkbox"/> \$15,000 -\$24,999</p> <p><input type="checkbox"/> \$25,000 -\$34,999</p> <p><input type="checkbox"/> \$35,000 -\$44,999</p> <p><input type="checkbox"/> \$45,000 -\$54,999</p> <p><input type="checkbox"/> \$55,000 -\$64,999</p> <p><input type="checkbox"/> \$65,000 -\$74,999</p> <p><input type="checkbox"/> \$75,000 -\$84,999</p> <p><input type="checkbox"/> \$85,000 -\$94,999</p> <p><input type="checkbox"/> \$95,000 +</p>	<p><b>Your HOME zip code:</b> _____</p> <p><b>Child’s Race / Ethnicity (check one)</b></p> <p><input type="checkbox"/> African American</p> <p><input type="checkbox"/> Asian / Pacific Islander</p> <p><input type="checkbox"/> Caucasian</p> <p><input type="checkbox"/> Hispanic</p> <p><input type="checkbox"/> Native American</p> <p><input type="checkbox"/> Other (please specify) _____</p>
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**Please answer the following questions for the child that is enrolled in kindergarten this year.**

<p>1. Is your child currently covered by medical insurance? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If “Yes”, what type of insurance? <input type="checkbox"/> Private, <input type="checkbox"/> Medicaid, <input type="checkbox"/> Nevada Check Up, <input type="checkbox"/> Other _____</p> <p>2. Has your child been seen by a medical provider for a routine check-up (not an illness) in the <i>past 12 months</i>? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Does your child have a primary care provider (regular doctor, nurse practitioner or physician’s assistant)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>4. Has your child seen a dentist in the past 12 months? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. Has your child ever had a cavity? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>6. Within the last 12 months how many times have you taken your child to the Emergency Room (not Urgent Care) for an illness or injury that was <u>not life-threatening</u>? <input type="checkbox"/> None (0) <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> 10 or more</p> <p>7. Please check all medical conditions listed below that your child has</p> <p><input type="checkbox"/> Asthma/Airway Disorder <input type="checkbox"/> Glasses/Contacts</p> <p><input type="checkbox"/> Diabetes <input type="checkbox"/> Hearing Aid/Impairment</p> <p><input type="checkbox"/> Seizures <input type="checkbox"/> Physical Disability</p> <p><input type="checkbox"/> Mental Health Condition <input type="checkbox"/> ADD/ADHD</p> <p><input type="checkbox"/> Cancer <input type="checkbox"/> None</p> <p><input type="checkbox"/> Other (specify) _____</p> <p>8. Do you think your child may have a medical problem that he/she has not seen a doctor for? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, what is it? _____</p> <p>9. If immunizations were not required for school, would you still have your child immunized? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>10. Where do you take your child for immunization (shots)? If you have used more than one of these, please check the last one:</p> <p><input type="checkbox"/> Primary Care Provider <input type="checkbox"/> Health District (Child’s regular doctor) <input type="checkbox"/> School-Based Clinic</p> <p><input type="checkbox"/> Community Health Clinic <input type="checkbox"/> Other (specify): _____</p> <p>11. Has your child ever been tested for lead poisoning? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>12. Have you experienced any barriers to accessing health care for your child? <b>(check all that apply)</b></p> <p><input type="checkbox"/> None <input type="checkbox"/> Lack of transportation</p> <p><input type="checkbox"/> Lack of insurance <input type="checkbox"/> Lack of good medical providers</p> <p><input type="checkbox"/> Lack of money <input type="checkbox"/> Other (please specify): _____</p> <p>13. Have you ever tried to get mental or behavioral services for your child? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If “Yes”, have you had trouble getting services? <input type="checkbox"/> Yes (explain) _____ <input type="checkbox"/> No</p> <p>14. In general, are you able to follow your doctor’s recommendations for medications and/or follow up visits? <input type="checkbox"/> All of the time <input type="checkbox"/> Some of the time <input type="checkbox"/> Most of the time <input type="checkbox"/> None of the time</p> <p>If you did not say “All of the time”, please explain why not: _____</p> <p>15. In general, how many times a week does your child do at least 30 minutes of physical activity? (circle one)</p> <p>0 1 2 3 4 5 6 7</p> <p>16. What type of pre-school did your child attend most often in the past 12 months? <b>(check one)</b></p> <p><input type="checkbox"/> Head start <input type="checkbox"/> Private <input type="checkbox"/> Home Based <input type="checkbox"/> Home Based</p> <p><input type="checkbox"/> School/University Campus <input type="checkbox"/> None/Stayed Home</p> <p><input type="checkbox"/> Other _____</p>
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**PLEASE RETURN THIS SURVEY TO YOUR CHILD’S TEACHER BY TUESDAY SEPTEMBER 8, 2009**

Thank you for your participation. If you are interested in participating in future research please contact the Nevada Institute for Children’s Research and Policy at (702) 895-1040 or via email at nicrp@unlv.nevada.edu.

**TEACHERS:** Please return the survey to your school’s front office or mail to **NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154**

# Cuestionario de Salud de Kinder

**ESTIMADOS PADRES DE FAMILIA O GUARDIAN:** La siguiente encuesta ha sido diseñada por Nevada Institute for Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboración con el Centro de Salud de Sur de Nevada y el Distrito Escolar del Condado. La información adquirida en este estudio se utilizará para ayudar a comprender la salud de los niños que comienzan la escuela preescolar este año. Le hemos pedido que participe porque usted tiene un niño en la escuela preescolar. Toda la información obtenida será utilizada para discutir y estudiar el nivel de salud colectiva del grupo. Nunca habrá conexión entre el nombre de su niño(a) y sus respuestas. **Todo información en este estudio será confidencial.**

<b>Edad del niño(a):</b> _____	<b>Ingreso anual del hogar (cheque uno)</b>	<b>Su código postal CASERO:</b> _____
<b>Nombre de la escuela primaria:</b> _____	<input type="checkbox"/> \$0 -\$14,999	<b>Etnicidad del Niño(a)</b>
<b>Sexo del niño(a):</b> Masculino Femenino	<input type="checkbox"/> \$15,000 -\$24,999	<input type="checkbox"/> Afro Americano
<b>Peso del niño(a) :</b> _____ lbs.	<input type="checkbox"/> \$25,000 -\$34,999	<input type="checkbox"/> Asiático / Isleño Pacifico
<b>Estatura del niño(a):</b> _____ ft. _____ in. (12in = 1ft)	<input type="checkbox"/> \$35,000 -\$44,999	<input type="checkbox"/> Caucásico
<b>Total de niños(as) viviendo en casa (Edades 0-17):</b> _____	<input type="checkbox"/> \$45,000 -\$54,999	<input type="checkbox"/> Hispano / Latino
<b>Total de adultos viviendo en casa (Edades 18+):</b> _____	<input type="checkbox"/> \$55,000 -\$64,999	<input type="checkbox"/> Nativo Americano
	<input type="checkbox"/> \$65,000 -\$74,999	<input type="checkbox"/> Otro (especifique) : _____
	<input type="checkbox"/> \$75,000 -\$84,999	
	<input type="checkbox"/> \$85,000 -\$94,999	
	<input type="checkbox"/> \$95,000 +	

**Por favor conteste las siguientes preguntas sobre el niño(a) que se va a matricular en kinder este año.**

- ¿Su niño(a) en este momento cuenta con seguro medico?
  - Si  No
 ¿Encaso de si? ¿que tipo de seguro?  Privado  Medicaid  Nevada Check-Up  Otro \_\_\_\_\_
- ¿Su niño(a) ha sido visto por un proveedor de servicio médico este año para un examen de rutina (no por enfermedad) en los últimos 12 meses?
  - Si  No
- ¿Tiene su niño(a) un medico familiar (médico, enfermera de práctica o asistente de médico )?
  - Si  No
- ¿Ha visto su niño(a) a un dentista en los últimos 12 meses?
  - Si  No
- ¿Ha tenido su niño(a) caries?  Si  No
- En los últimos 12 meses, ¿cuántas veces ha tenido que llevar a su niño(a) a la sala de emergencias por una enfermedad o lesión sin peligro la vida?
  - Ninguna (0)  1-2  3-5  6-9  10 o mas
- Por favor seleccione todas las condiciones medicas que tenga su niño(a):
  - Asma  Lentes/ de Contacto
  - Diabetes  Oído/Discapacidad Auditiva
  - Convulsiones  Discapacidad física
  - Condición de Salud Mental  ADD/ADHD
  - Cáncer  Ninguno
  - Otra (especifique) \_\_\_\_\_
- ¿Cree que su niño(a) tenga un problema médico pero usted no ha ido a ver a un médico?
  - Si  No
 Si la respuesta es si, por favor especifique: \_\_\_\_\_
- Si las vacunas no fueran necesarias para la escuela, ¿Vacunaría (inmunizaciones) a su niño?
  - Si  No
- ¿Dónde lleva a su hijo para inmunizaciones (vacunas)? Si ha utilizado más de un tipo de local, por favor, indique la más reciente:
  - Proveedor cuidado primario (médico regular)
  - Centro de Salud  Clínica de salud basada en la escuela
  - Clínica de Salud Comunitaria
  - Otro (especifique): \_\_\_\_\_
- ¿A sido su niño(a) examinado por contaminación de plomo?
  - Si  No
- ¿Se ha enfrentado con obstáculos en el acceso de salud para su hijo? **(cheque todo que apliqué)**
  - Ninguno  Falta de aseguransa
  - Falta de proveedores médicos de calidad
  - Falta de transportacion  Otro (especifique): \_\_\_\_\_
- ¿Alguna vez ha tratado de obtener servicio de salud mental o de comportamiento para su niño(a)?
  - Si  No
 En caso que sí, ¿ha tenido problemas para obtener servicios?
  - No  Si (especificue) \_\_\_\_\_
- En general, ¿Puede seguir recomendaciones del médico en cuanto a medicamentos o seguimiento de las visitas?
  - Todo el tiempo  Algunas veces
  - La mayor parte del tiempo  Nunca
 Si no contesto "Todo el tiempo", por favor especifique porque: \_\_\_\_\_
- En general, cuantes veces a la semana hace su niño(a) por lo menos 30 minutos de actividad fisica? (circule uno)
 

0 1 2 3 4 5 6 7
- Que tipo de escuela preescolar atendio su niño(a) mas en los ultimos 12 meses? **(cheque uno)**
  - Head start  Privada  Ninguna
  - Campamento en Escuela/Universidad  Otra \_\_\_\_\_

**VUELVA POR FAVOR ESTA INSPECCION A MAESTRO DE SU NIÑO POR EL MARTES, SEPTIEMBRE 8, 2009**

Gracias por su participación. Si esta interesado en participar en investigaciones futuras por favor contacte al Nevada Institute for Children's Research and Policy al (702) 895-1040 o por email al nicrp@unlv.nevada.edu .

**TEACHERS:** Please return the survey to your school's front office or mail to **NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154**

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# Health Status of Children Entering Kindergarten



## Results of the 2010-2011 (Year Three) Nevada Kindergarten Health Survey

May 2011

**This project was completed in collaboration with the following:**

All Nevada County School Districts  
Nevada School District Superintendents  
Nevada State Health Division  
Head Start Collaboration & Early Childhood Systems Office

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Nevada Institute For Children's Research & Policy

# NICRP

**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

School of Community Health Sciences

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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 Community Health Sciences, 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 didn't want to stop there; she wanted to transform that research into meaningful legislation that would make a real difference in the lives of our children.

**NICRP's Mission:** The Nevada Institute for Children's Research and Policy (NICRP) looks out for Nevada's children. 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: <http://www.nic.unlv.edu>

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## INTRODUCTION

Academic achievement for children is vital to their success in life. Those that do well in school have greater opportunities for post-secondary education, and later have better prospects for employment. One of the major factors that can affect a child's academic achievement is his or her health status. Academic outcomes and health conditions are consistently linked in the literature (Eide, Showalter, & Goldhaber, 2010; Taras & Potts-Datema, 2005). Children with poor health status, and especially those with common chronic health conditions, have increased numbers of school absences and more academic deficiencies (Taras & Potts-Datema, 2005). In addition, children that have health insurance have fewer absences from school (Yeung, Gunton, Kalbacher, Seltzer, & Wesolowski, 2010). In a study concerning excused versus unexcused absences, children with greater absenteeism had lower academic performance, and those with excused absences performed better than those with unexcused absences (Gottfried, 2009). Therefore, to increase the likelihood for academic success in children, we need address their health concerns. Preventative care is crucial to a child's ability to succeed in school.

According to data from the KIDS COUNT Data Center at the Annie E. Casey Foundation (2010), 10 percent of Nevada's teens (ages 16-19) are not in school and not high school graduates compared to 6 percent nationally. The national dropout prevention center lists poor attendance and low achievement as two of the significant risk factors for school dropout (Hammond, Linton, Smink, & Drew, 2007). Additionally, studies examining school dropout rates indicate that early intervention is necessary to prevent students from dropping out of school. Middle and high school students that drop out likely stopped being engaged in school much earlier in their academic career. Therefore, early prevention and intervention is crucial to improving graduation rates. Ensuring that children have their basic needs met, including receiving adequate health care, can directly impact a child's academic achievement as well as increase their likelihood for high school graduation.

To gain information on the health status of children entering the school system and better track student health status, in 2008, the Nevada Institute for Children's Research and Policy (NICRP) partnered with the state's 17 school districts, the Southern Nevada Health District, and the Nevada State Health Division (NSHD) to conduct an annual health survey examining the health status as well health insurance status of Nevada's children entering kindergarten.

The goal of this study is to longitudinally quantify the health status of children as they enter school to be able to identify specific areas for improvement to eventually increase academic success among Nevada's students. This report reflects the results of the third year of the Annual Kindergarten Health Survey.

## METHODOLOGY

The original survey was created in 2008 in partnership with the Clark County School District (CCSD) and the Southern Nevada Health District (SNHD). 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 contained 22 questions. Small revisions to the survey have occurred each year, therefore, data for all items

# INTRODUCTION

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presented in this report may not be available for all three years. The current version of the survey is still available in both English and Spanish and contains 27 questions (10 demographic questions and 17 health related questions).

In the Fall of 2010, questionnaires were distributed to kindergarten teachers in all public elementary schools in the state, with the exception of schools in the Clark County School District. The Clark County School District requested that only a sample of their schools be included in the survey to reduce burden on school staff. Therefore, surveys were sent to a randomly selected sample of schools ( $n = 139$ ). This sample size was obtained based on a 5 percent margin of error in survey results. In addition, schools were divided by Title I status, and a representative random sample of both Title I and non-Title I schools were selected. Schools qualify as Title I when they serve large populations of children from low income families (typically a minimum of 40%) and receive supplemental federal funding from the Department of Education. Title I status was provided by the Clark County School District. It was determined that 74 of the 214 elementary schools in the district (35%) were Title I schools. Forty-eight schools (35 percent of the target 139 schools in the sample) were randomly selected using SPSS (a statistical analysis software) from a list of all Title I schools. The remaining 91 schools (65 percent of the needed sample of 139) were randomly selected from a list of non-Title I schools.

For all districts, surveys were distributed to parents during the first part of the school year. Parents who chose to participate then turned in the survey to either the school office or their child's teacher. The surveys were then returned to NICRP via mail.

Each survey was assigned a unique identification number by NICRP staff to aid in tracking of survey responses. All survey responses received as of February 1, 2011 were entered into the statistical analysis software PASW Statistics 17.0. The surveys completed in Spanish were entered into the English database by a bilingual staff member at NICRP. No identifying information was included on any of the surveys.

## 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 relies on the memory and honesty of the respondents in the survey. Additionally, several of the questions were left blank on the surveys received. NICRP kept all surveys in the database used for analysis, but it is important to note when reading percentages presented in the figures below that not all respondents answered all questions. Some figures may have a total of 10,487 (indicating all who responded to the question), while others may have a smaller number of total cases because of respondents leaving that particular question blank. All percentages calculated for this report are based on the total number of people answering the question, rather than the total number of people who completed a survey.

## SURVEY RESULTS

Presented in the figures below are the basic frequencies (counts and percentages) for all questions asked in the survey. Cross tabulations were also calculated for selected variables to provide additional information on specific topics. A chi-square statistic was also calculated to test for the statistical significance of the differences provided in the cross tabulation tables. Percentage calculations as well as statistical significance are presented with figures, as appropriate. In addition, the 2010-2011 data was compared across counties for the current data collection period (Clark, Washoe, Rural), and with the 2008-2009 and the 2009-2010 data.

### RESPONSE RATES

Each school district involved in this study provided the total number of kindergarten students enrolled for the 2010-2011 school year. A total of 24,032 surveys were sent out to participating schools. At the end of the data collection period (February 2011), 10,487 surveys were received for a **response rate of 43.6 percent**. The response rate has steadily improved each year (2008-2009 = 36%; 2009-2010 = 39.2%) and since 2008-2009, the response rate has increased by 21 percent, indicating that more parents are willing to participate in the survey and provide this information.

Response rates were also calculated for each of the school districts individually. These rates ranged from 18.8 percent in Lincoln County to 100 percent in Storey County, and are detailed in Table 1.1 below.

**Table 1.1: Survey Response Rate by School District**

School District	# Surveys Sent Out	# Surveys Returned	Response Rate
Carson City	570	350	61.4
Churchill County	310	185	59.7
Clark County	15,745	6,825	43.3
Douglas County	425	268	63.1
Elko County	579	309	53.4
Esmerelda County	20	5	25.0
Eureka County	15	9	60.0
Humboldt County	260	156	60.0
Lander County	105	51	48.6
Lincoln County	80	15	18.8
Lyon County	900	379	42.1
Mineral County	35	22	62.9
Nye County	500	299	59.8
Pershing County	55	38	69.1
Storey County	33	33	100.0
Washoe County	4,345	1,479	34.0
White Pine County	90	64	71.1
<i>All Districts</i>	24,067	10,487	43.6

## RESPONSE RATES

Figure 1.1 illustrates the participation of Washoe, Clark and all other counties. These rates are consistent with the data received from the 2009-2010 school year (Clark County = 59.0 percent; Washoe County = 17.6 percent; Rural = 23.4 percent).

Because Clark County is the largest school district in the state, it was expected that Clark County parents would comprise the vast majority (65.1 percent) of the respondents for this survey.

**Figure 1.1: Survey Participation by School District**  
(2010-2011  $n = 10,487$ )

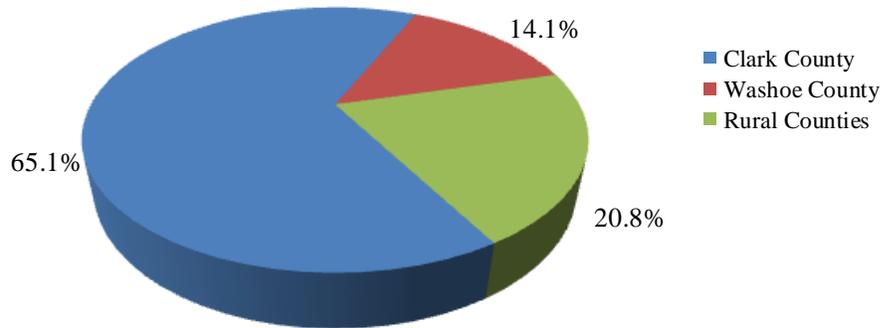
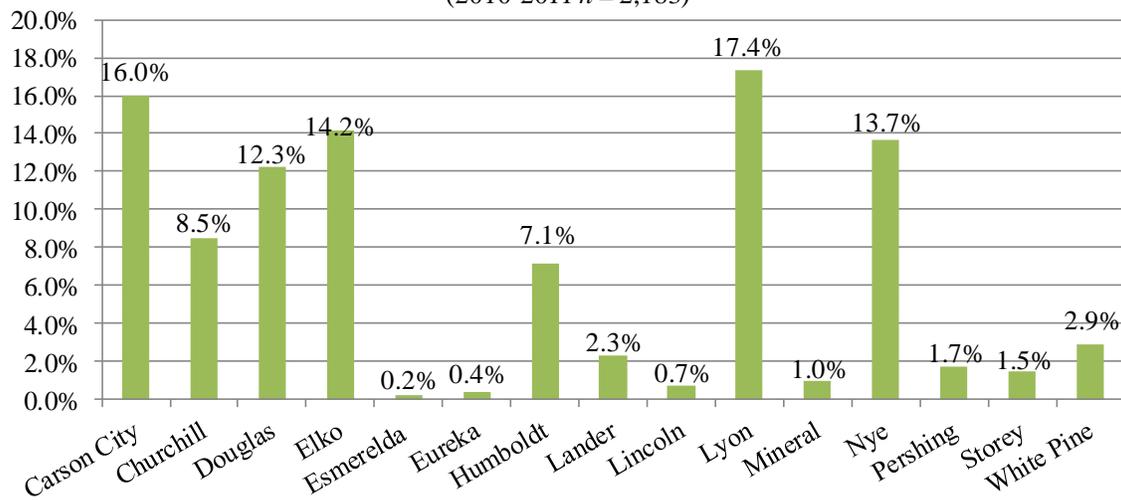


Figure 1.2 illustrates county-specific participation for all rural counties, which represent 20.8 percent of the total respondents.

**Figure 1.2: Survey Participation Among All Rural Counties**  
(2010-2011  $n = 2,183$ )



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## DEMOGRAPHICS

The survey was created to be one page in length, with one side written in English and the reverse side written in Spanish. Of the 10,487 completed surveys, **82.8 percent completed the survey in English**, while 17.2 percent completed it in Spanish.

Parents were asked to respond to questions regarding their annual household income, and their child's gender, race/ethnicity, and pre-school setting prior to kindergarten. Data for each of these questions are presented in Figures 2.1 through 2.3 below, with all percentages calculated using the total number of completed responses rather than the total number of returned surveys.

### *Gender*

Information on the gender of the kindergarten student was collected. Among the respondents that answered this question, the distribution was split nearly equally between males (49.0 percent) and females (49.3 percent). These results are consistent compared to 2008-2009 and 2009-2010 results.

### *Annual Household Income*

According to the U.S. Census Bureau, Small Area Income and Poverty Estimates, the 2009 estimated median household income in Nevada was \$53,310. 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, parents who responded to this survey reported lower annual household incomes, with 57.1 percent of all respondents reporting annual income below \$45,000.

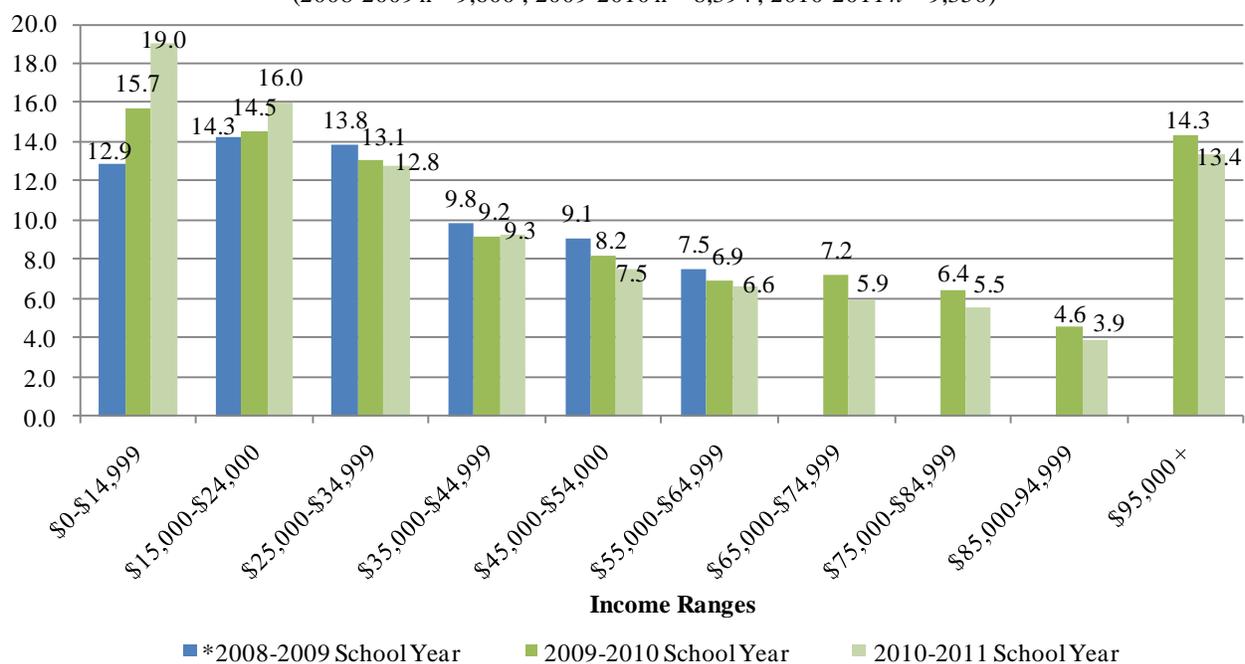
## DEMOGRAPHICS

Compared to previous survey years:

- The number of families with annual income levels below \$25,000 has steadily increased. Approximately 5 percentage points from 2009-2010, and 8 percentage points from 2008-2009 school year data.
- The number of families with an annual income at \$25,000 and above has steadily decreased over the past three years. About 42.9 percent of respondents reported incomes of \$45,000 or more, a decrease of about 4.5 percentage points from the 2009-2010 school year, and a decrease of about 6.5 percentage points from data in 2008-2009.
- **These results indicate that more families are earning less compared to the previous two years of the survey.**

**Figure 2.1: Annual Household Income**

(2008-2009 n = 9,600 ; 2009-2010 n = 8,394 ; 2010-2011 n = 9,350)



\* Data received from the 2008-2009 school year only includes income data through \$64,000. In 2009, the survey was revised to include a breakdown of additional income levels.

# DEMOGRAPHICS

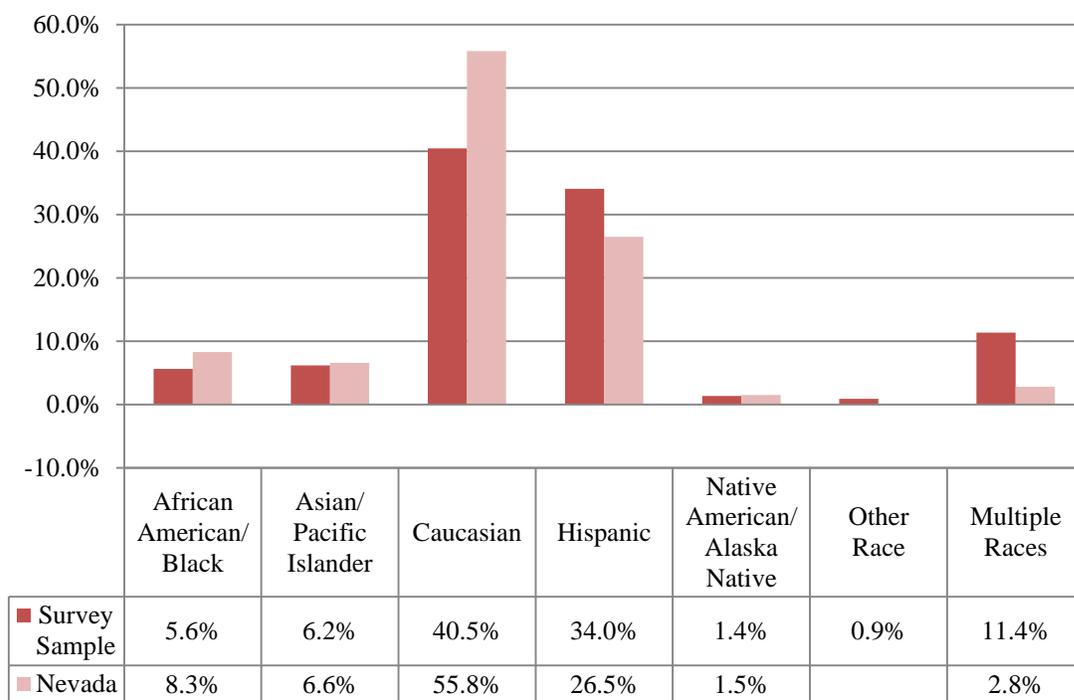
## Race/Ethnicity

Responses indicating the race/ethnicity of the kindergarteners are roughly similar in distribution to the race/ethnicity percentages most recently estimated by the U.S. Census Bureau for the entire population in Nevada (see Figure 2.2).

However, there were proportionally fewer Caucasians and more people of Hispanic origin as well as people identifying with multiple races responding to this survey than seen in Nevada's Census estimates.

Compared to previous results, race/ethnicity distributions are similar among 2008-2009 and 2009-2010 results. There have been fluctuations across survey years in both Native American/Alaskan Native and Multiple Races categories. When comparing results across counties for the 2010-2011 school year (refer to Table 13.1 in Appendix A), there are significantly more African American/Black and Asian/Pacific Islander individuals in Clark County compared to both Washoe and Rural counties.

**Figure 2.2: Child's Race/Ethnicity**  
(2010-2011 *n* = 10,102)



### Race/Ethnicity

\* Nevada state data from 2009 Census QuickFacts (<http://quickfacts.census.gov>)

\* These rates are fairly consistent with the data received from the 2009-2010 school year

## DEMOGRAPHICS

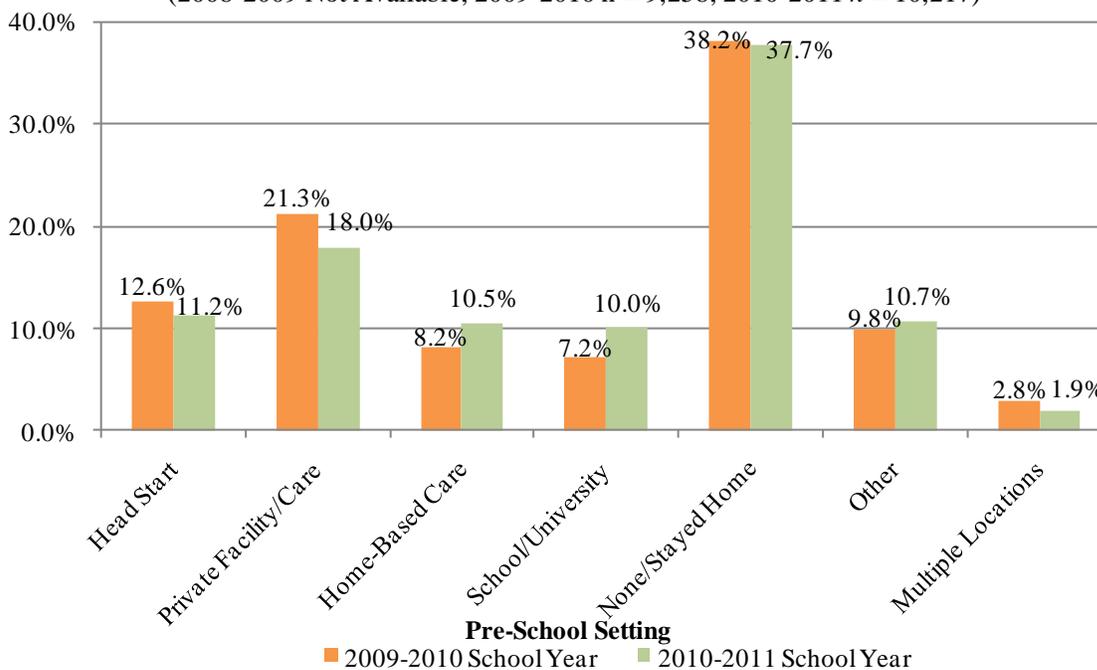
### *Pre-school Setting*

The survey also asked about the type of pre-school setting, if any, respondents' kindergarteners had attended in the twelve months prior to kindergarten. Figure 2.3 illustrates answers to these questions.

- 37.7 percent of respondents indicated that their kindergartener had stayed at home in the prior year, not attending pre-school, which is consistent with results received in 2009-2010.
- There has been a slight decrease (approximately 2-3 percentage points) in reported attendance in Head Start, Private Facility/Care, Home-Based Care, School/University, and Other care compared with results received in 2009-2010.

**Figure 2.3: Child's Type of Pre-School Setting During Past Twelve Months**

(2008-2009 Not Available; 2009-2010 n = 9,258; 2010-2011 n = 10,217)



## INSURANCE STATUS

### *Background*

Nevada has consistently placed near the bottom of nationwide rankings with regard to the number of children covered by health insurance. According to the U.S. Census Bureau Current Population Survey (2009), approximately 10 percent of children under the age of 18 in the United States are uninsured compared to 13 percent of children under the age of 18 in Nevada.

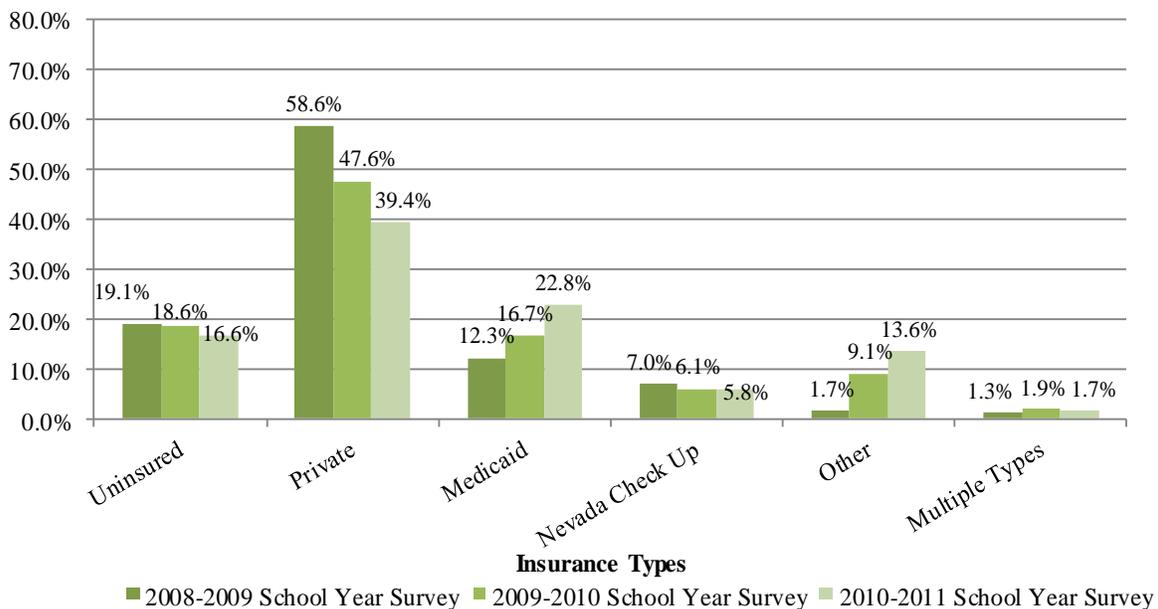
A correlation exists between children’s health insurance status and access to health care services. Research indicates that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes when compared to insured children. For example, uninsured children were nearly ten times as likely as insured children to have an unmet health need (Robert Wood Johnson Foundation, 2005). **Nevada has been ranked the second highest state in the country for uninsured children not receiving any care**, at 43.4 percent of children (Robert Wood Johnson Foundation, 2005). In addition, Nevada was ranked last when compared nationally across four dimensions: access and affordability, prevention and treatment, potential to lead healthy lives, and performance of overall health systems (Securing a Healthy Future, 2011).

### *Status of Health Insurance of Kindergarten Students*

In this study, respondents were asked whether or not their child had health insurance. Approximately 83 percent of parents surveyed indicated that their child had some type of health insurance coverage. **16.6 percent of respondents stated their child had no coverage.** Since 2008-2009, the percent of children without health insurance has decreased by 2.5 percentage points. This indicates that **slightly more children are insured compared to the last two years.**

**Figure 3.1: Types of Health Insurance Covering Children**

(2008-2009 *n* = 10,626; 2009-2010 *n* = 9,110; 2010-2011 *n* = 10,183)



## INSURANCE STATUS

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### **Of the health insurance options:**

- Most parents indicated that their child had private health insurance (39.4 percent).
- 28.6 percent of children had public health insurance (either Medicaid or Nevada Check Up).

Although the statistics found in this study are similar to national trends in children's health insurance coverage (Kaiser Family Foundation in 2009), these percentages are considerably different from previous years of the Kindergarten Health Survey. For example, 58.6 percent of respondents indicated their child had private health insurance in 2008-2009 and 47.6 percent in 2009-2010; while 19.3 percent indicated their child had public health insurance in 2008-2009 and 22.8 percent in 2009-2010. **This indicates that compared to previous years, rates of private insurance are decreasing while enrollment in public insurance is increasing.**

Approximately 13.6 percent of respondents indicated that their child had some "other" type of health insurance not listed on the survey questionnaire. These "other" types of insurance ranged from coverage provided through the military or a Native American reservation, or were unclear responses that were difficult to recode into one of the survey categories. It is possible that some of these "other" types of insurance could indeed be added to the private or public survey categories.

In addition, 1.7 percent of respondents selected multiple types of health insurance for their children, which are categorized as "multiple" in Figure 3.1. The majority of these respondents specified that their child had both Medicaid and a private form of health insurance, or Medicaid and Nevada Check Up.

# INSURANCE STATUS

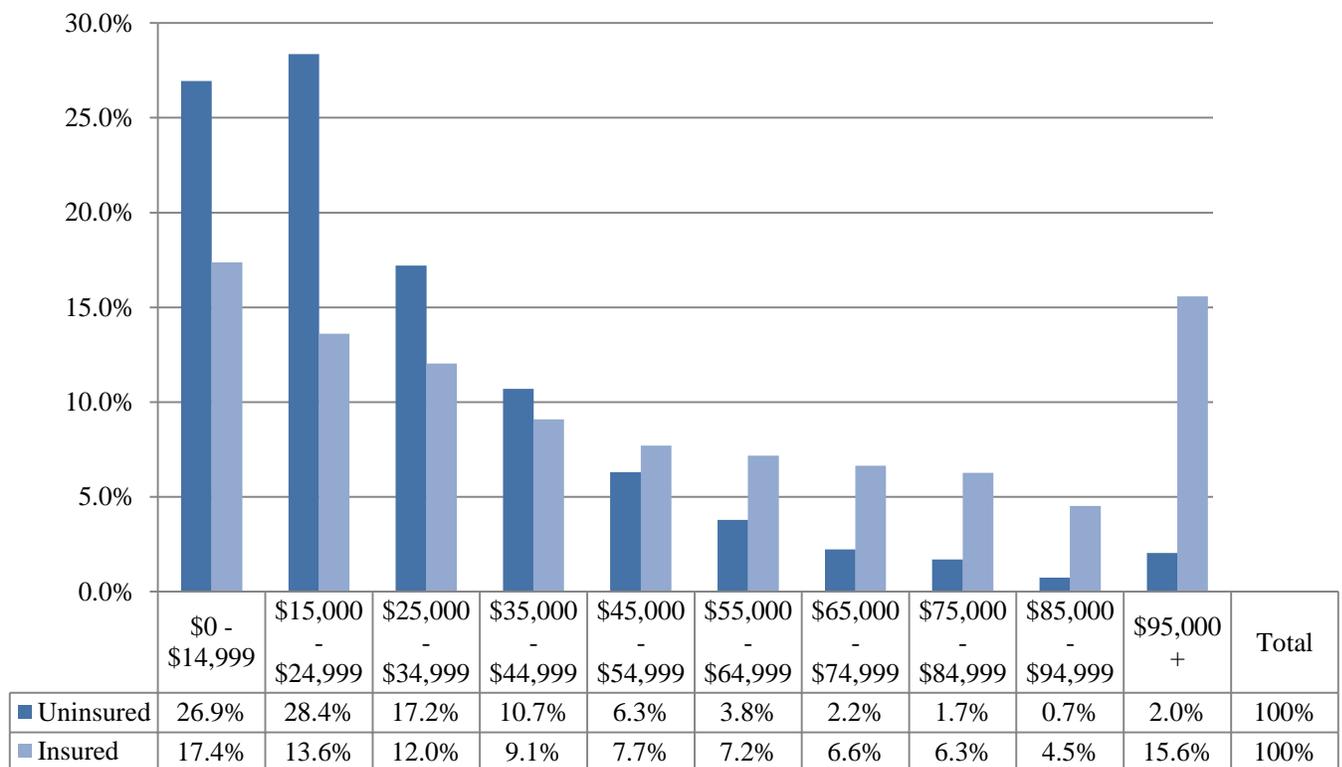
## Annual Household Income and Insurance Status

Not surprisingly, **children from families with a lower household income are more likely to be uninsured** (see Figure 3.2).

- 55.3 percent of children living in households with an annual income of less than \$25,000 have no health insurance, similar to the data obtained in school years 2008-2009 and 2009-2010
- The Kaiser Family Foundation study (2009) found that of those lower- and middle-income families that had access to private health insurance coverage, only 19 percent could afford the premiums.

**Figure 3.2: Annual Household Income by Child's Insurance Status**

(2010-2011: Uninsured  $n = 1,477$ ; Insured  $n = 7,851$ ; Total  $n = 9,328$ )



### Household Income

\* These findings are significant at  $p < .001$ .

\*\* Percentages are calculated out of the number within each insurance category.

# INSURANCE STATUS

## *Race/Ethnicity and Insurance Status*

Figure 3.3, detailing the relationship between race/ethnicity and insurance status, shows that the majority of children who are uninsured are Hispanic (54.1 percent), followed by Caucasian children (25.6 percent).

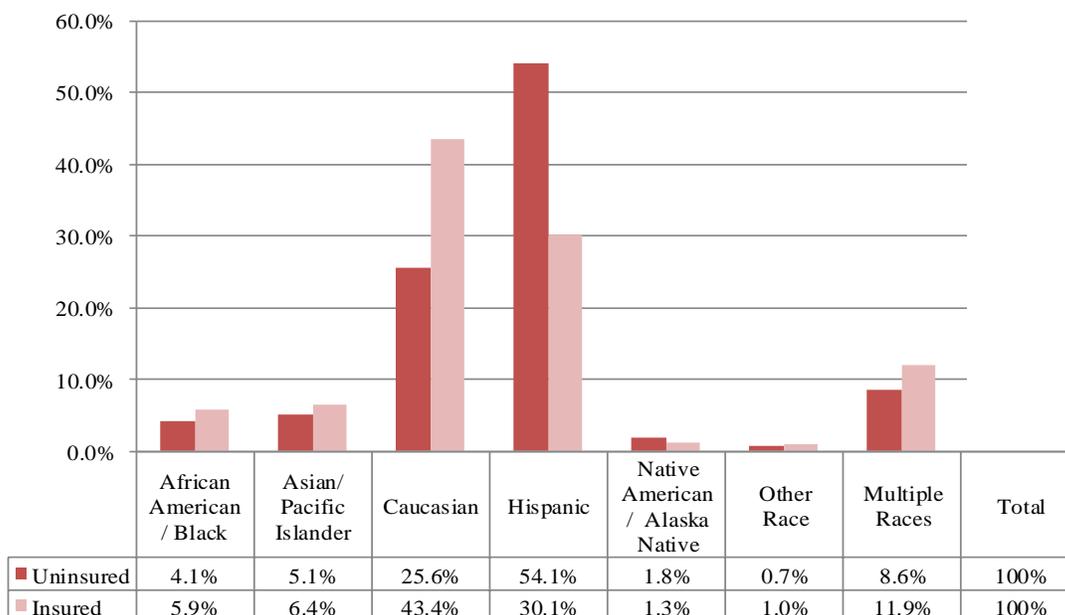
Compared to baseline data in the 2008-2009 and 2009-2010 school years,

- the percentage of uninsured Caucasian respondents has increased 3 percentage points since 2008-2009;
- the percentage of Hispanic respondents with no insurance has decreased about 4.5 percentage points since 2008-2009, Hispanic individuals are still more likely to be uninsured compared to other racial/ethnic groups.

Research indicates that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Newport & Mendes, 2009; Robert Wood Johnson Foundation, 2005). The rates of uninsured children are typically even higher in states with relatively large percentages of Hispanic immigrants such as Nevada. For instance, U.S. Census Bureau data estimate that approximately 32.4 percent of Hispanics across the country are uninsured (DeNavas-Walt, Proctor, & Smith, 2010). Although many of the children are eligible for public health insurance, barriers to enrollment continue to impede these children from obtaining insurance coverage. Examples of barriers include language, past negative experiences, and perceptions that insurance is not needed (Perry, Kannel, & Castillo, 2000).

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

(2010-2011: Uninsured  $n = 1,636$ ; Insured  $n = 8,440$ ; Total  $n = 10,076$ )



### Race/Ethnicity

\* These findings are significant at  $p < .001$ .

\*\* Percentages are calculated out of the number within each insurance category.

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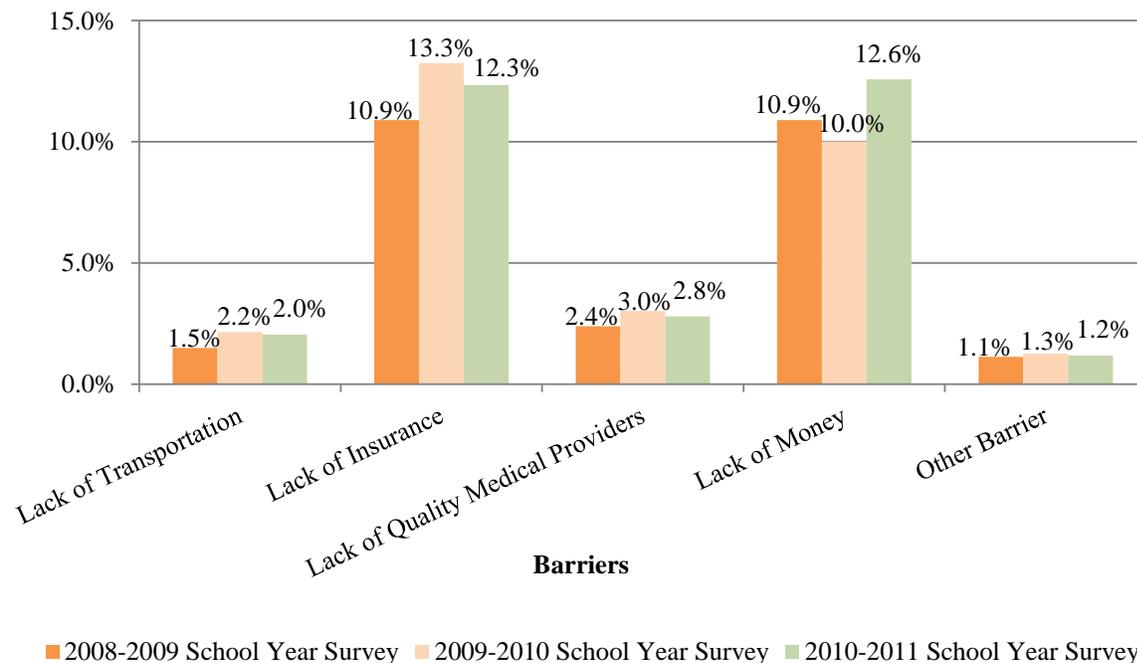
## HEALTHCARE AND COMPLIANCE

### *Barriers to Accessing Healthcare*

When asked about accessing health care for their child, **80.2 percent of survey respondents indicated that they had NOT experienced barriers.** However, 19.8 percent of participating parents had experienced at least one barrier. The majority of these respondents had difficulty due to either a “lack of insurance” or a “lack of money” for health care services.

**Figure 4.1: Types of Barriers When Accessing Health Care for Child**

(2008-2009 *n* = 10,382; 2009-2010 *n* = 9,275; 2010-2011 *n* = 10,271)



Most parents of uninsured children cannot afford to pay the high out-of-pocket costs charged for medical services. A recent report examining uninsured families found that financial barriers were less likely to be an issue for lower-income families with an insured child or children (Kaiser Family Foundation 2009). Even if children are covered by health insurance, other financial barriers such as high co-pays or premiums are likely to impede children’s access to health care. A combination of these financial barriers may result in many parents foregoing necessary medical care for their children.

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

- a disproportionate percentage were Hispanic at 39.5 percent,
- **more respondents without health insurance reported a barrier than did respondents with health insurance** (56 percent versus 12.4 percent),
- 45.5 percent of respondents reporting a barrier had an annual household income of less than \$25,000, and
- 60.0 percent of respondents reporting a barrier had an annual household income of less than \$35,000.

# HEALTHCARE AND COMPLIANCE

## Healthcare Compliance

Parents were also asked if they were generally able to follow the recommendations provided by their child's doctor.

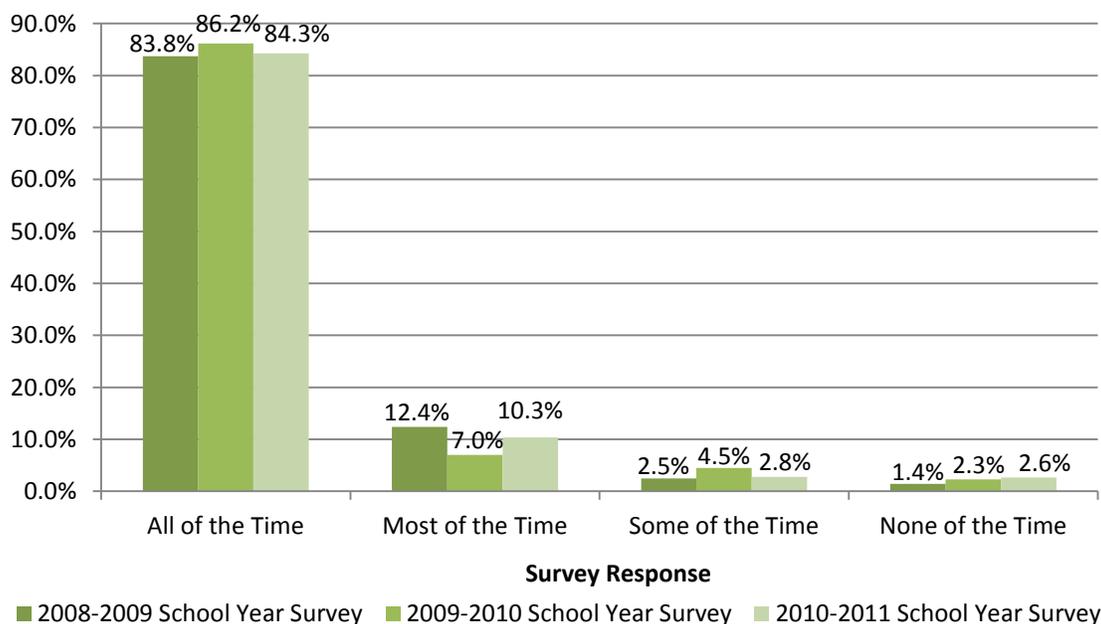
- The majority (84.3 percent) of respondents indicated that they followed their child's doctor's recommendations all of the time.
- Only 2.6 percent of respondents reported that they never followed their child's doctor's recommendations.
- Compared to the prior year, the percentage of respondents following doctor's recommendations all of the time decreased by about 2 percentage points.
- Even though the percentage of those never following recommendations in 2010-2011 was almost identical to the 2009-2010 data (2.6 vs. 2.3 percent), compared to 2008-2009 data, the percentage of respondents never following recommendations almost doubled (1.4 vs 2.6).

If parents indicated anything other than "all of the time" in response to this question, they were asked to list any reasons for their inability to comply with the doctor's recommendations.

- The most frequently listed reasons concerned financial barriers, such as not being able to afford the prescribed care plans because of lack of insurance or inadequate income.
- Other reasons included various accessibility issues, including inconvenient scheduling of appointments and treatments or a lack of adequate transportation.
- The remaining responses indicated a lack of trust in medical providers, forgetting to administer medications, not going to recommended follow-up visits due to money for the co-pay or the parent feels the child does not need it, or the belief that the child no longer needed the care plan because he or she was feeling better.

**Figure 4.2: Ability to Follow Doctor's Recommendations for Child's Care**

(2008-2009  $n = 10,674$ ; 2009-2010  $n = 9,263$ ; 2010-2011  $n = 10,237$ )



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## ROUTINE CARE

### *Background*

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 screening, and child well visits. Children without health insurance are more likely to miss out on routine care than insured children. Hoilette, Clark, Gebremariam, and Davis (2009) found that 23.3% of uninsured children in the United States reported that they did not have a regular source of care.

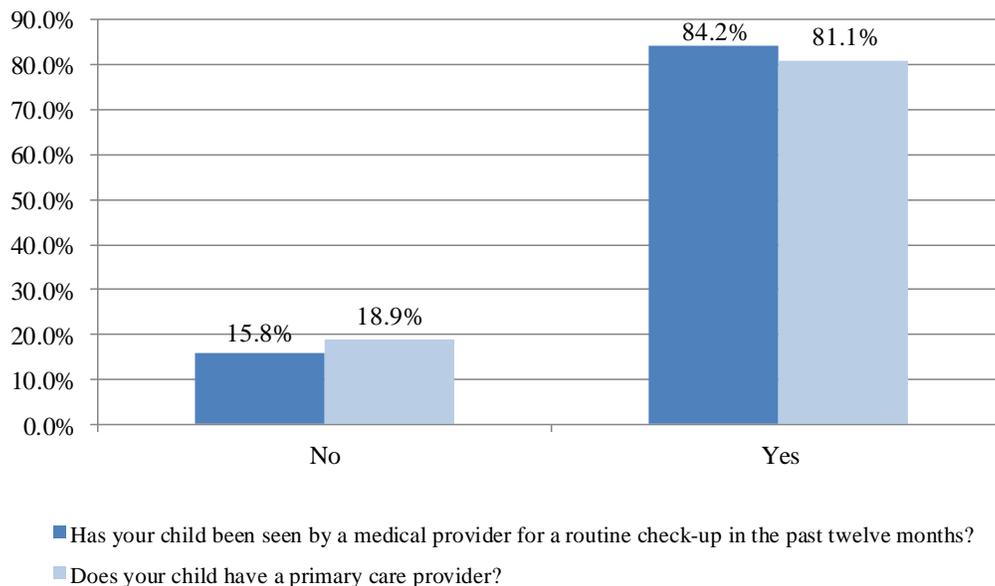
Having access to regular primary care services, or a medical home, is another key indicator of children's overall health status. Children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Shi, et al., 1999). Primary care providers, (e.g. physicians, physician's assistants, nurses) offer a medical home where children can get basic care services, such as annual check-ups and immunizations. Children that have access to a regular primary care provider coordinating and organizing their care tend to have a better health status than children without access to a primary care provider (Starfield, Shi & Macinko, 2005).

### *Routine Care of Kindergarten Students*

Current survey results indicate 84.2 percent of kindergarteners had at least one routine check-up in the twelve months prior to the date of the survey. Similarly, 81.1 percent of parents reported that their child had a primary care provider. **Compared to 2008-2009 data, both of these percentages have increased by two points.**

**Figure 5.1: Child's Routine Check-Ups and Presence of Primary Care Provider**

(2010-2011: Check-Up  $n = 10,408$ ; Primary Care Provider  $n = 10,367$ )



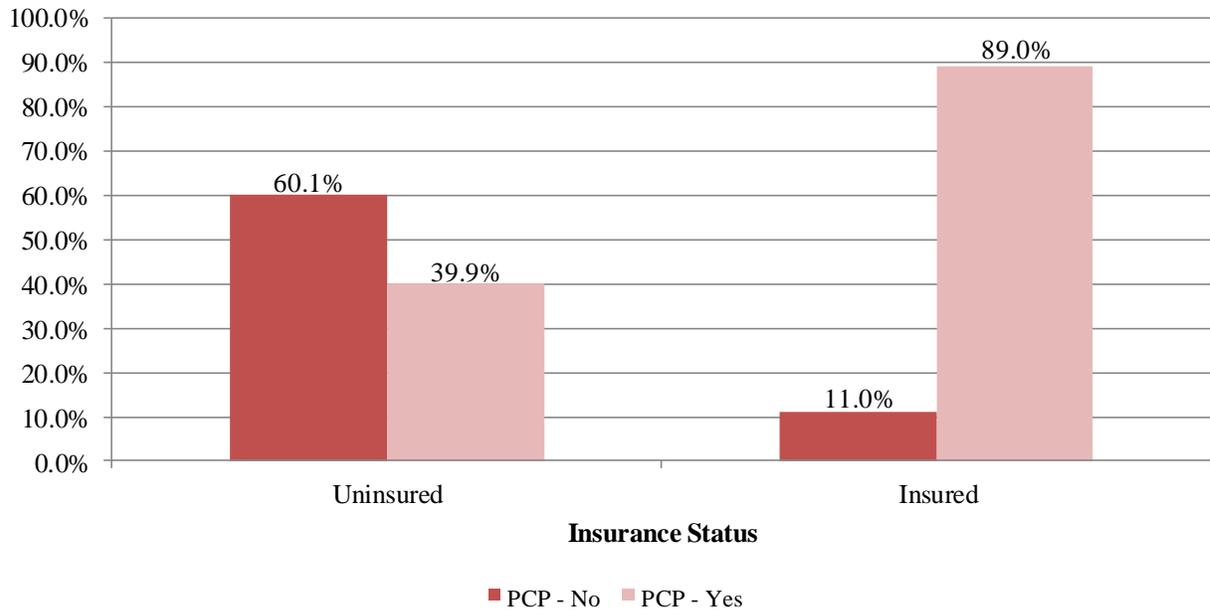
## ROUTINE CARE

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Approximately 89.0 percent of children with health insurance also have a primary care provider, while only 39.9 percent of children without insurance have a primary care provider. **These results clearly indicate that a child's insurance status is related to having a primary care provider** (see Figure 5.2).

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

(2010-2011: Uninsured  $n = 1,670$ ; Insured  $n = 8,674$ ; Total  $n = 10,344$ )



\*These findings are statistically significant at  $p < .001$ .

\*\*Percentages are calculated out of the number within each insurance category.

## ROUTINE CARE

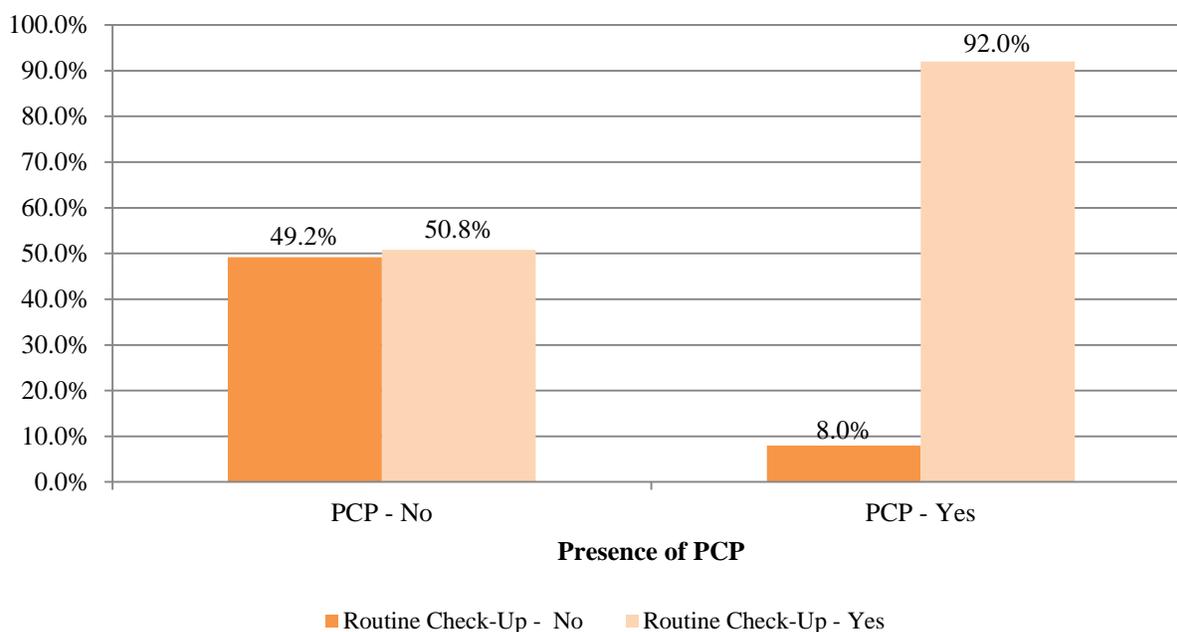
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Having a primary care provider also influences whether or not children have had a routine check-up in the past 12 months (see Figure 5.3).

- Of the children that have a primary care provider, 92.0 percent had a routine check-up in the last year.
- Of the children without a primary care provider, nearly half (49.2 percent) have not had a routine check-up in the last year.
- These percentages are similar to percentages found in 2008-2009 and 2009-2010 data.

**Figure 5.3: Child's Routine Check-Ups by Presence of Primary Care Provider (PCP)**

(2010-2011: No PCP  $n = 1,941$ ; Has PCP  $n = 8,364$ ; Total  $n = 10,305$ )



\*These findings are statistically significant at  $p < .001$ .

\*\*Percentages are calculated out of the number within each PCP category.

## CARE FOR ILLNESS OR INJURY

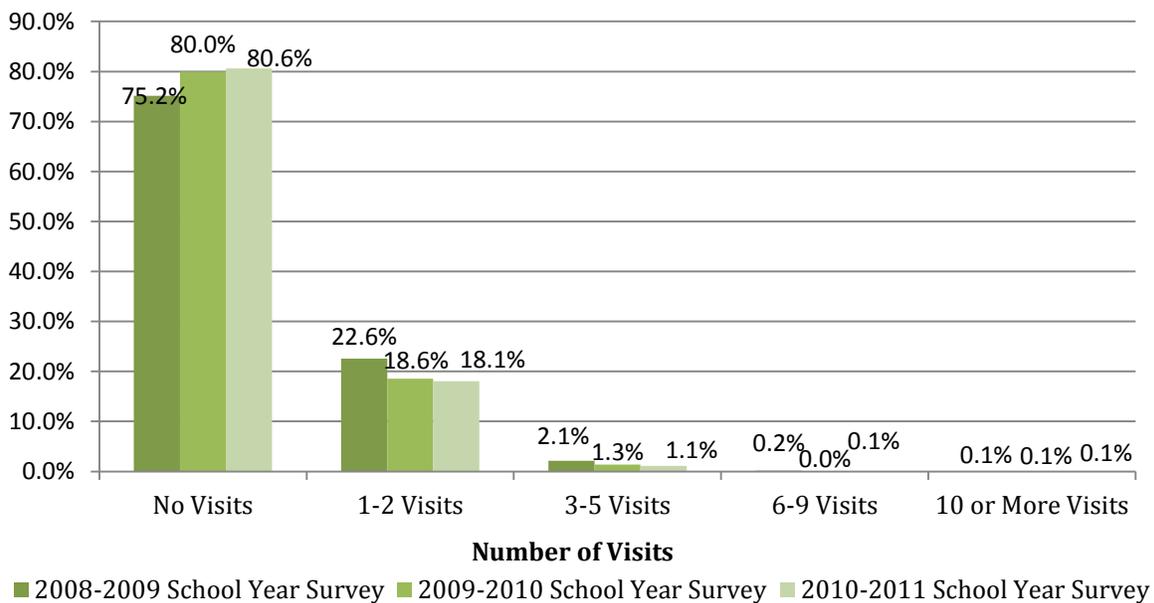
In recent years, a growing number of uninsured children with minor, non-life-threatening conditions have accessed health care services in emergency care facilities. This upward trend is likely related to an expanding uninsured population and higher costs for health care. Most uninsured children come from lower-income families that cannot afford to pay the high costs for medical care. These families are often forced to use hospital emergency rooms (ERs) or other urgent care facilities for non-life-threatening conditions.

Parents were asked about the frequency in the past twelve months of ER visits for non-emergency care for their child.

- Approximately 18.1 percent of respondents indicated they had visited an ER for a non-life threatening illness or injury once or twice in the past year, which was fairly consistent with data from 2009-2010 (see Figure 6.1).

**Figure 6.1: Number of Emergency Room Visits for Non-Life-Threatening Care**

(2008-2009  $n =$  ; 2009-2010  $n = 10,970$ ; 2010-2011  $n = 10,380$ )

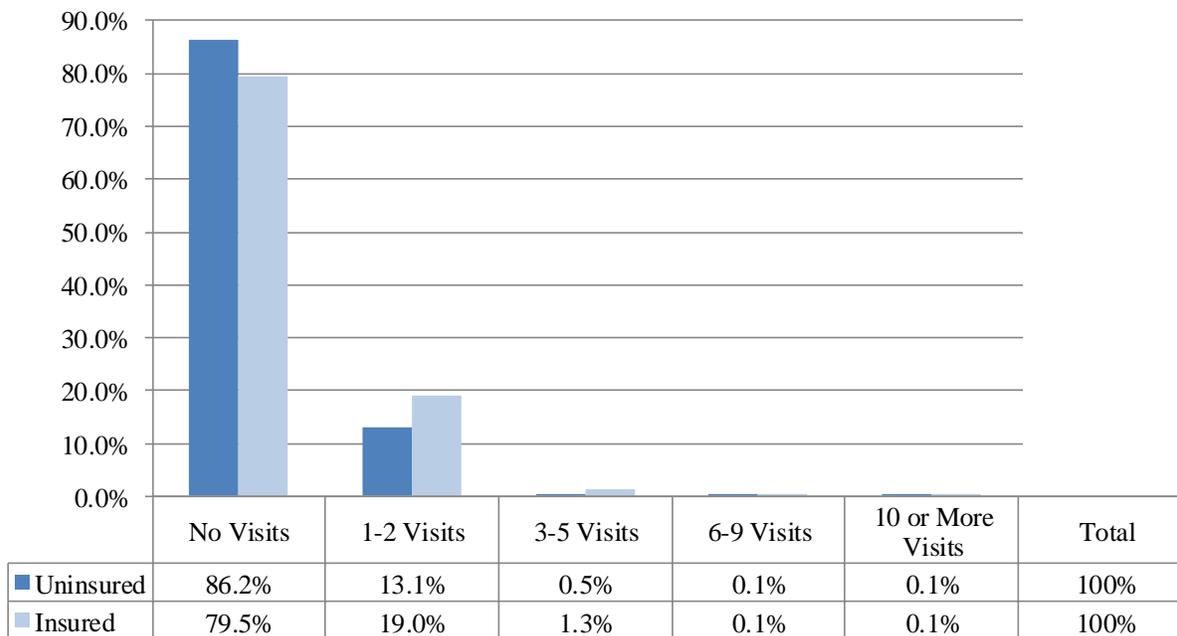


## CARE FOR ILLNESS OR INJURY

**Insurance status was NOT a significant indicator of usage of an ER.** Figure 6.2 shows the percentage of children that had been to an ER by whether or not they have health insurance. For both insured and uninsured groups, the majority of children had not been to an ER for non-emergencies in the past 12 months.

**Figure 6.2: Number of Emergency Room Visits for Non-Life-Threatening Care by Child's Insurance Status**

(2010-2011: Uninsured  $n = 1,679$ ; Insured  $n = 8,677$ ; Total  $n = 10,356$ )



### Number of Visits

\*These findings are not statistically significant;  $p = .14$ .

\*\*Percentages are calculated out of the number within each insurance category.

## MEDICAL CONDITIONS

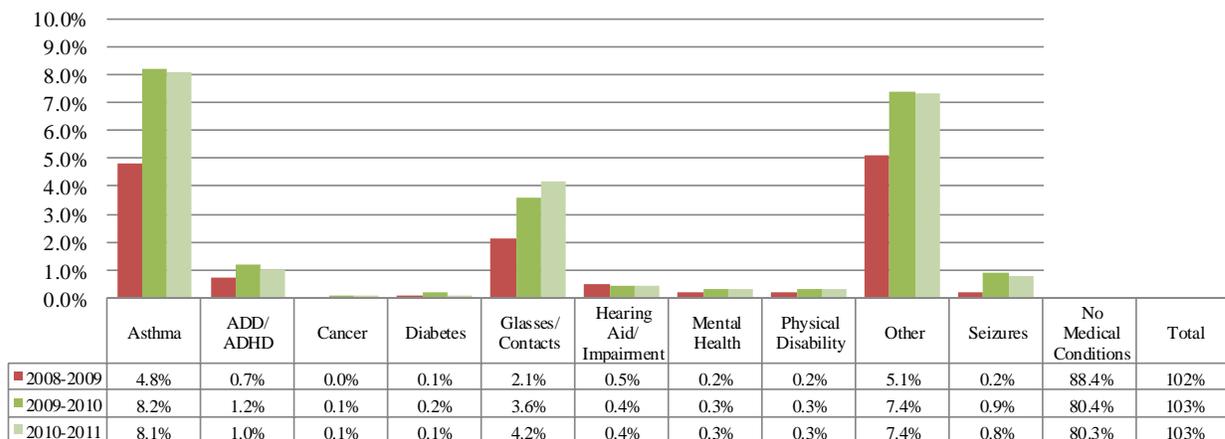
Many of Nevada’s children have special medical conditions. Treatment for such children is often expensive and requires a team of medical care providers, led by a primary care physician, devoted to the treatment and maintenance of such conditions. Thus, health insurance coverage is vital for children with special health conditions, as it ensures that these children have access to ongoing care and treatment. Generally, health insurance serves as a safeguard for parents and families against the higher costs necessary for the treatment and maintenance of special medical conditions.

According to this year’s survey results, **22.7 percent of parents indicated that their child had a medical condition requiring special treatment** (see Figure 7.1). More specifically:

- 8.1 percent of respondents reported that their child had asthma.
  - Asthmatic children without insurance were more likely than insured children to be at risk for severe complications and unnecessary hospitalizations (Halterman et al., 2008). Halterman et al., 2008 found that 13 percent of children with asthma (759,000 nationwide) were uninsured at some time during the year. More recently Diedhiou, Probst, Harding, Martin, and Xirasagar (2010), found that approximately 9% of 14,916 children with special health care needs that live in the United States and have asthma lacked consistent health care coverage; children aged 0 to 5 years of age represented 23.7% (approximately 800 children) of that sample.
- The use of glasses or contacts has increased by 2 percentage points over the past three years (4.2 percent).
- Approximately 7.4 percent indicated an “other” health condition not listed on the survey. Such “other” conditions included allergies, skin ailments such as eczema, rare diseases or disorders, speech problems, and autism.

**Figure 7.1: Types of Medical Conditions in Children**

(2008-2009 *n* = 10,977; 2009-2010 *n* = 8,222; 2010-2011 *n* = 9,633)



\*Respondents can select multiple categories therefore the Total percent may exceed 100%.

## MEDICAL CONDITIONS

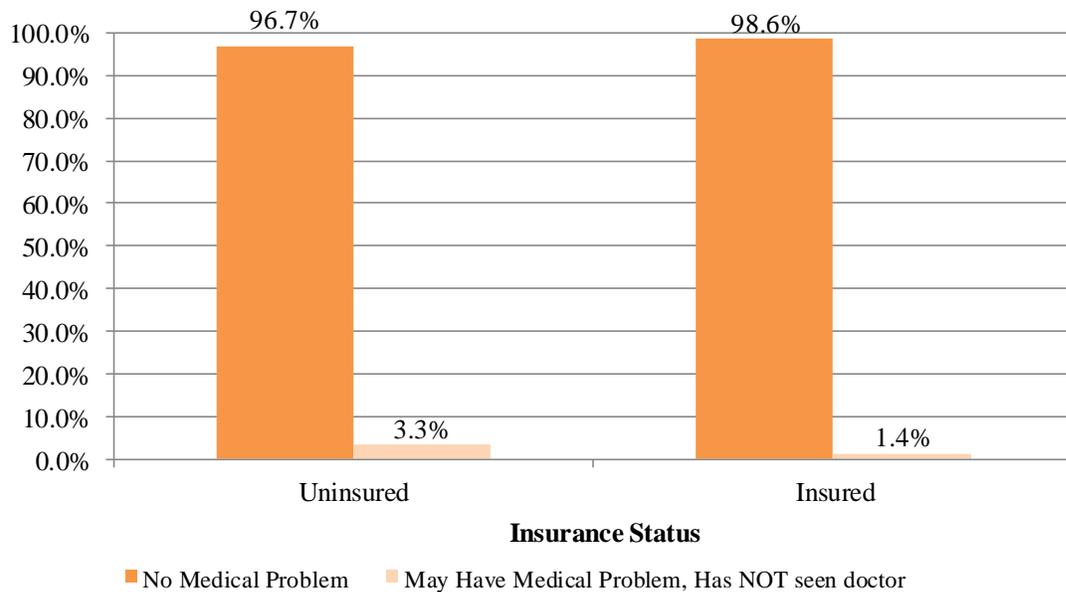
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Respondents were also asked if they thought their child had a medical condition that he or she has not seen a doctor for.

- The majority of parents reported that this was not an issue, with only 3.3 percent of uninsured or 1.4 percent of insured respondents indicating that their child may have a medical problem that could require a doctor's care.
- When considering only those respondents who indicated their child may have an untreated medical condition, 31.6 percent of the parents were uninsured, which is a decrease of 5 percent from 2009-2010.

**Figure 7.2: Medical Problems that May Require a Doctor by Child's Insurance Status**

(2010-2011: Uninsured  $n = 1,677$ ; Insured  $n = 8,703$ ; Total  $n = 10,380$ )



\*Percentages are calculated out of the number within each insurance category.

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## DENTAL CARE

### *Background*

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. These children also miss more days of school than children without dental problems.

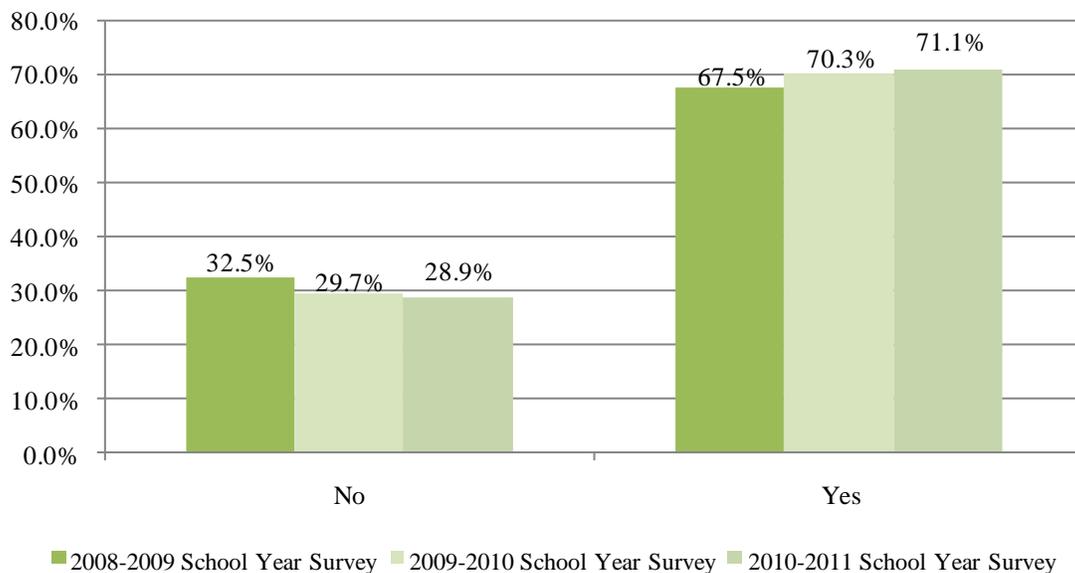
Research also indicates that uninsured children are much more likely to have unmet dental needs. One study found that 2 percent of insured children had an unmet dental need whereas 8 percent of uninsured children had an unmet dental need (Child Trends, 2004). Additionally, uninsured children are 1.5 times more likely to not have received preventative care in the last year and 3 times more likely to have an unmet dental need than insured children (Liu et al., 2007). More specifically, Edlestien and Chinn (2009) found that, nationally, 58% of children with private coverage had a dental visit in 2004 compared to 34% of children with Medicaid and the State Children's Health Insurance Program (SCHIP), and only 28% of children without dental coverage.

### *Dental Care of Children Entering Kindergarten*

To prevent oral health problems, it is generally recommended that children receive regular dental check-ups every six months to a year. In this survey, **28.9 percent of survey respondents indicated that their kindergartener had NOT seen a dentist in the past twelve months**, which was almost identical to the 2009-2010 data, and a decrease of nearly 3 percentage points from 2008-2009 data.

**Figure 8.1: Child's Dental Visit**

(2008-2009 n = 11,007; 2009-2010 n = 9,449; 2010-2011 n = 10,412)



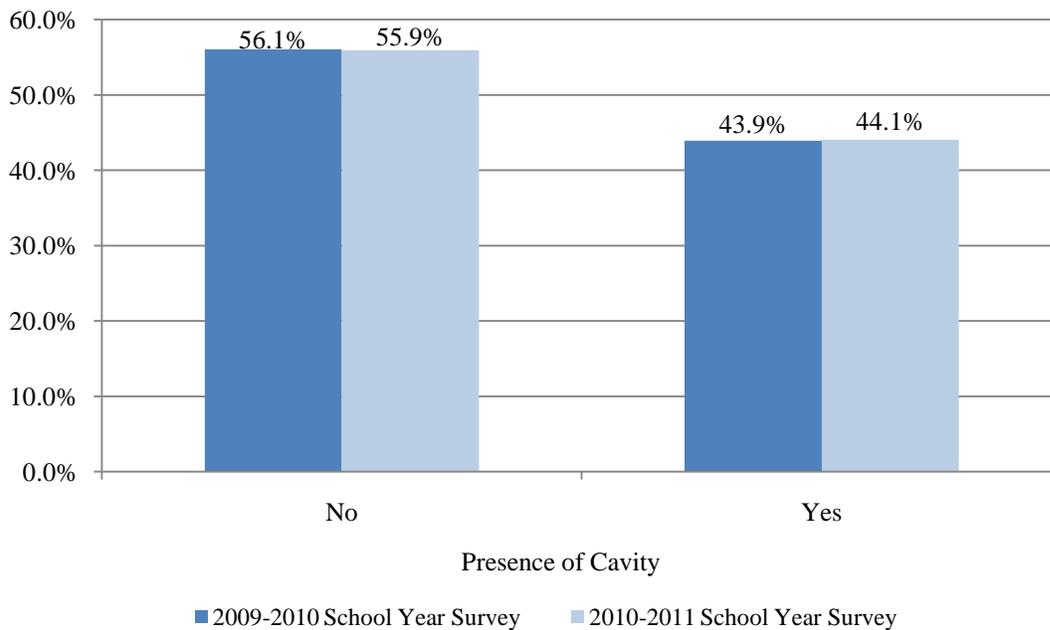
## DENTAL CARE

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**Approximately 44 percent of kindergarteners in this sample have already had a cavity.** Interestingly, more children that have visited a dentist in the past year have had a cavity (84.9 percent), and more children that have not visited a dentist have not had a cavity (15.1 percent). This is likely because visiting a dentist alerts parents of any cavities a child may have, and so the children who have not visited a dentist may actually have undiagnosed cavities.

**Figure 8.2: Presence of Cavities**

(2008-2009 Not Available; 2009-2010 n = 9,238; 2010-2011 n = 10,222)



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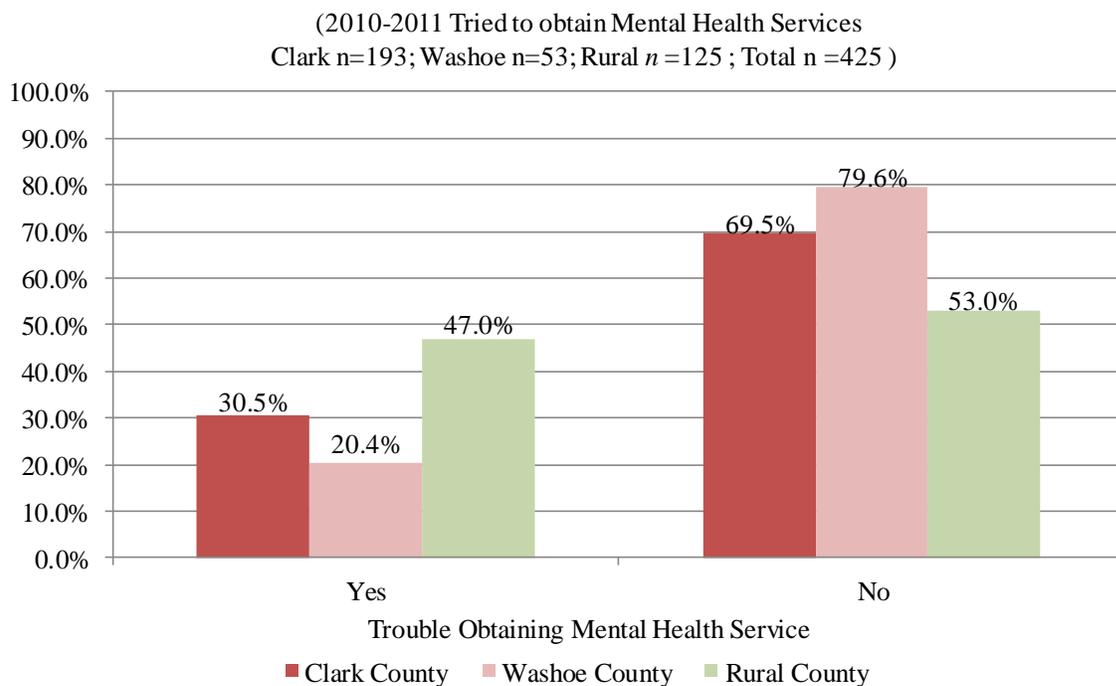
## MENTAL HEALTH

Many of Nevada’s children have mental health conditions that require specialized treatment from mental health providers. 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. 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 (Child Trends, 2004).

The survey results indicated **4.1 percent of respondents have tried to access mental health services for their children**, a percentage similar to both the 2008-2009 and 2009-2010 data. Of the respondents who have tried to access these services for their child:

- 92.1% of those who tried to access services had insurance. It is possible that not having insurance might be a barrier in attempting to access mental health services.
- **Over one third (34.7 percent) reported having trouble obtaining the services.**
  - When examining this variable across counties, it was found that a higher percentage of individuals in rural counties reported having difficulties accessing mental health services compared to both Clark and Washoe counties (see Figure 9.1).
  - When examining this variable by year, percentages are similar to both the 2008-2009 and 2009-2010 data.

**Figure 9.1: Trouble Obtaining Mental Health Services by County**



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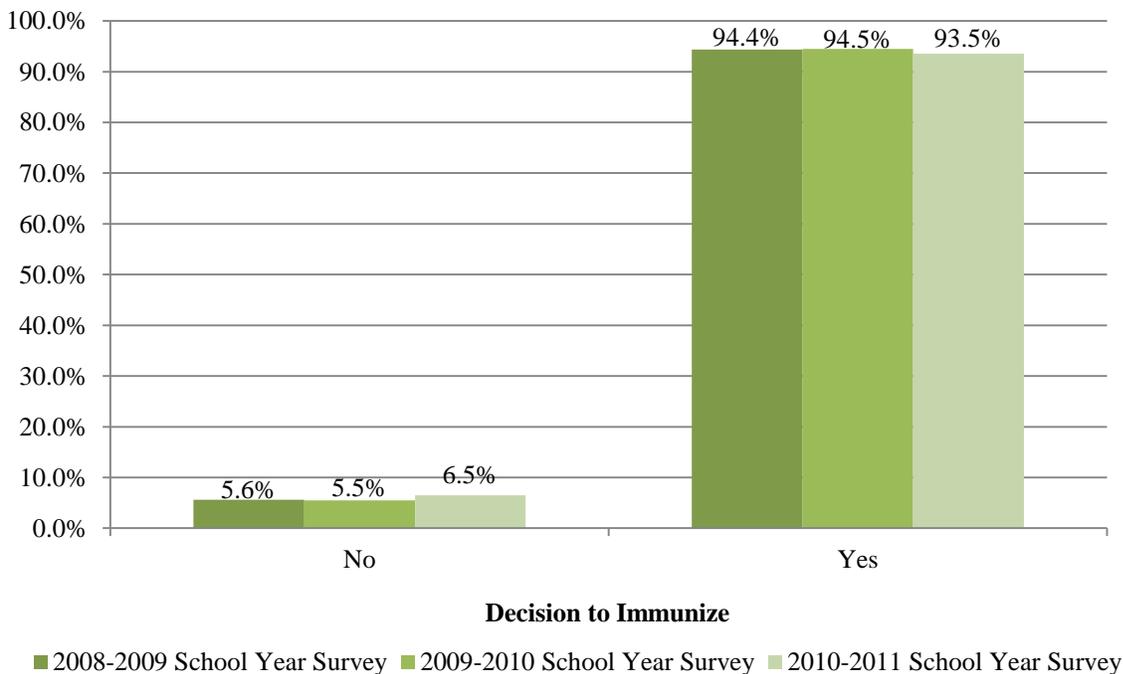
## IMMUNIZATIONS

Immunizing children in Nevada is important in preventing the spread of certain childhood diseases and avoiding public health outbreaks. According to the Centers for Disease Control and Prevention (CDC) (2009), vaccinations are particularly important for children, as they have lower disease-fighting immunity than adults and do not have maternal immunity against diseases that can be prevented via vaccine. In addition, children may be more susceptible to complications resulting from exposure. Getting children immunized also protects the community by preventing the spread of infectious diseases.

It seems that most of Nevada's parents understand the importance of immunizing their children against diseases. **Approximately 93.5 percent of parents would still immunize their child even if immunizations were not required by law, a rate nearly identical to baseline data.**

**Figure 10.1: Decision to Immunize if Immunizations Were Not Required**

(2008-2009  $n = 10,706$ ; 2009-2010  $n = 9,231$ ; 2010-2011  $n = 10,269$ )



# IMMUNIZATIONS

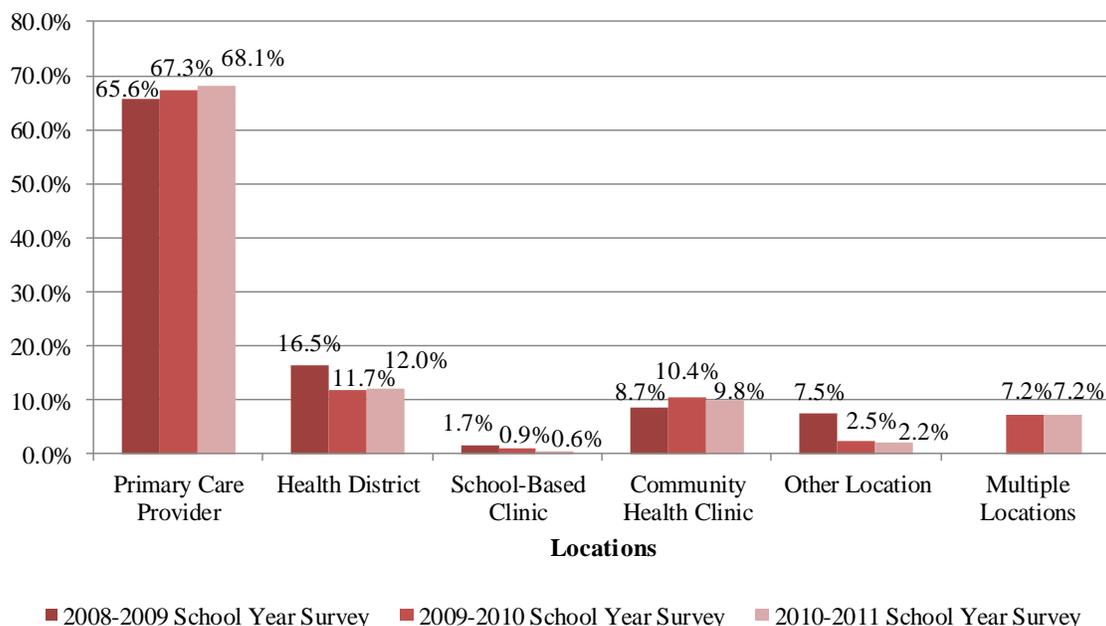
To ensure all children receive their immunizations on schedule, there is a broad array of organizations and clinics around Nevada that offer low-cost immunizations for children.

Some common locations that offer immunizations for children include: primary care provider offices, local health districts, school-based health clinics, and community health clinics.

- According to the results of this survey, a majority of children were immunized by a primary care provider (68.1 percent). Local health districts were the second most common place for children to get immunized (12.0 percent), followed by community health clinics (9.8 percent). Over 7 percent of respondents indicated multiple locations for immunizations, with the majority indicating their child had received immunizations from either a primary care provider and a local health district or a primary care provider and a community health clinic.
- In addition, 2.2 percent of respondents indicated that they go to some “other” location for immunizations. It is possible that some of these “other” types of locations could actually be one of the existing locations specified in Figure 10.2 below.
- A small percentage of parents (.3%) indicated that their child had not been immunized. A few of those respondents provided additional information such as their child was exempt from immunizations, or that the respondent chose not to have their child immunized.

Over the past three years, slightly more parents seem to be utilizing primary care providers for immunizations and less parents are using school based clinics and “other location”. All other data looks comparable to the data obtained in the previous school year.

**Figure 10.2: Immunization Locations**  
(2008-2009 n = 10,842, 2009-2010 n = 9,373; 2010-2011 n = 10,487)



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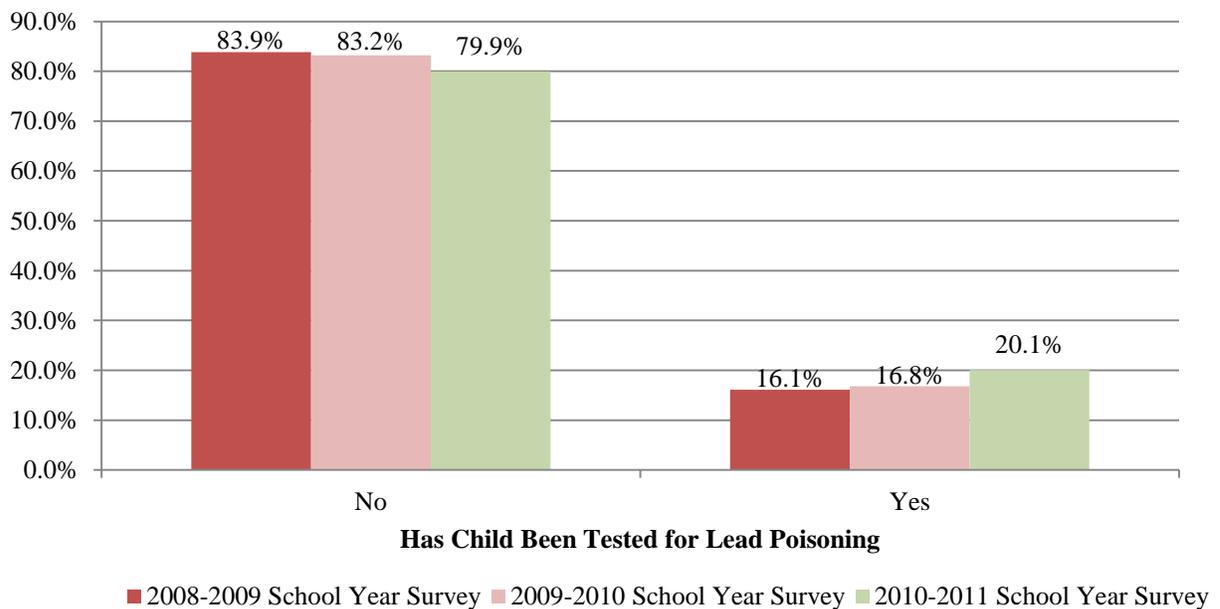
## LEAD SCREENING

Screening for elevated blood lead levels is an important way to determine if Nevada’s children are exposed to lead, and to prevent or treat serious health complications caused by lead exposure. Testing for elevated blood lead levels enables health care practitioners and public health professionals both to treat exposed children and to track the source of the lead exposure. In an effort to establish federal and state targets to control lead exposure, the Childhood Lead Poisoning Prevention Program (CLPPP) was established in Southern Nevada.

In the current study, parents were asked whether or not their child had been tested for lead poisoning. Only a small percentage of respondents (20.1 percent) indicated their child had been tested for lead poisoning. However, **this has increased from the previous two years by 4 percentage points.** Continued efforts to encourage screening of children, particularly at 12 and 24 months of age, are needed to fully understand the level of lead exposure in Nevada.

**Figure 11.1: Lead Poisoning Tests**

(2008-2009  $n = 10,667$ ; 2009-2010  $n = 9,282$ ; 2010-2011  $n = 10,250$ )



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## WEIGHT AND HEALTHY BEHAVIORS

Childhood obesity is a growing public health problem across the country. Epidemiologists have shown increases in children with Type II diabetes in recent years. Therefore, monitoring children's weight has become an important tool for analyzing potential health problems.

This survey asked parents to write in their child's height and weight information. NICRP used this information to calculate a Body Mass Index (BMI) value for all children with valid height and weight responses. BMI values were calculated using the standard formula employed by the CDC and other health agencies:

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

Many of the respondents left one or both of the height and weight questions blank, resulting in only 3,893 cases (37.1 percent of the entire sample) with a BMI value. Because some respondents child's height was outside of the 95% interval of average height of 4-7 year olds (based on the CDC, 2000) the number of cases with a valid BMI value dropped to 3,608 (34.4 percent of the entire sample).

Once a BMI was calculated, it was assigned a weight status category based on CDC standards, which use a child's age, gender, and BMI percentile to determine the child's weight status. Table 12.1, below, outlines the BMI percentile ranges for each weight status category.

**Table 12.1: Weight Status Categories by BMI Percentile Ranges**

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

Source: CDC About BMI for Children and Teens.

[http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html#What is BMI percentile](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html#What%20is%20BMI%20percentile)

For the purpose of this study, NICRP used 10 different weight status formulas: one formula each for females age 4.0, 4.5, 5.0, 5.5, and 6.0; and one formula each for males age 4.0, 4.5, 5.0, 5.5, and 6.0. These age categories account for all but one of the cases in the sample that have a valid age, gender, height, and weight (the age for this case seems to be an outlier). Table 12.2 outlines the calculations used to determine weight status categories. Because respondents left blank the question for child's age, the number of cases with a weight status category dropped to 3,597 (34.3 percent of the entire sample).

## WEIGHT AND HEALTHY BEHAVIORS

**Table 12.2: Weight Status Category Calculations Based on BMI Values**

Females				
Age	Weight Status Category			
	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				
Age	Weight Status Category			
	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

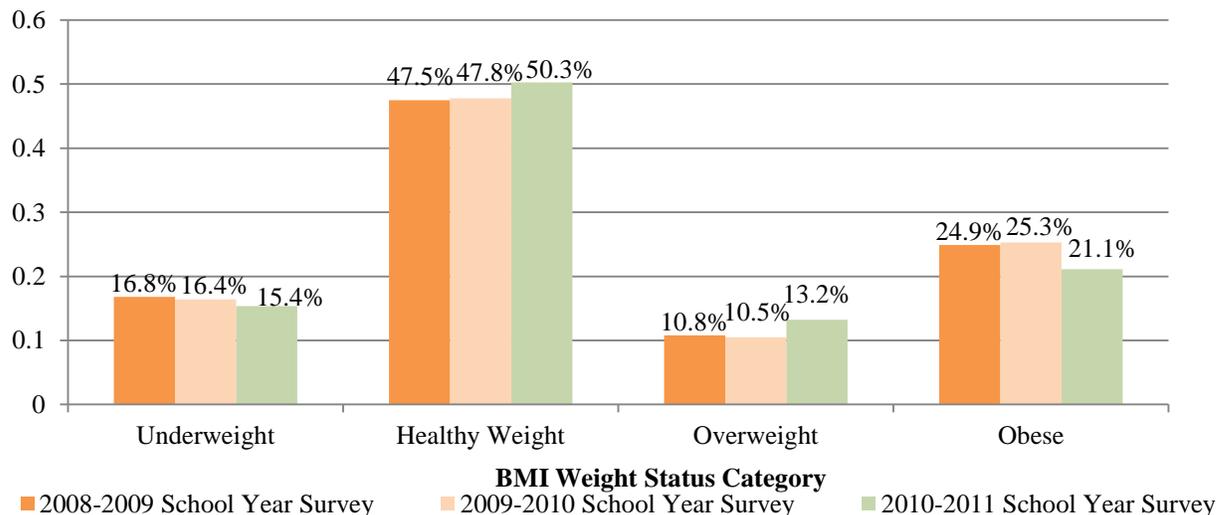
Source: CDC Body Mass for Age Tables. [http://www.cdc.gov/growthcharts/html\\_charts/bmiagerev.htm](http://www.cdc.gov/growthcharts/html_charts/bmiagerev.htm)

Over half (50.3 percent) of children entering kindergarten whose parents participated in this survey were calculated to be at a healthy weight, a rate which has increased by almost 3 percentage points compared to the previous school year (see Figure 12.1). **However,**

- **15.4% of children are underweight;** Washoe County has higher rates of underweight children (18.3%), followed by Clark (15.6%) and Rural counties (13.3%)
- **13.2 % of children are overweight, and approximately one quarter (21.1 %) of children are considered obese given the reported data.** Washoe County has higher rates of obese children (23.8%), followed by Clark (21.0%) and Rural counties (20.1%).

**Figure 12.1: Child's Weight Status Category**

(2008-2009  $n = 3,667$ ; 2009-2010  $n = 4,026$ ; 2010-2011  $n = 3,597$ )



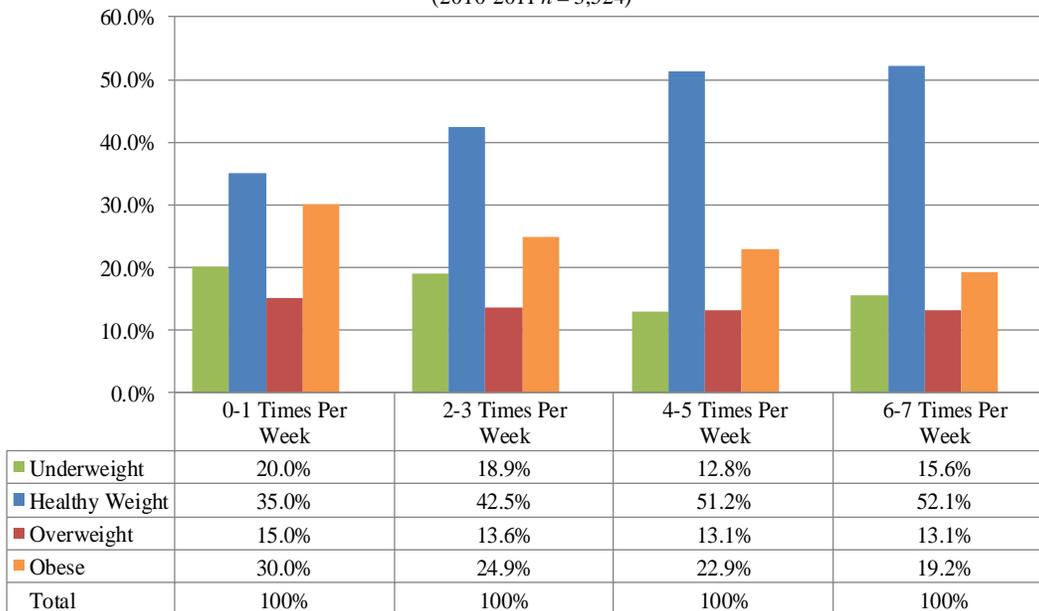
## WEIGHT AND HEALTHY BEHAVIORS

Parents were asked the number of times per week their child is physically active for at least thirty minutes. Figure 12.2 details the relationship between weight status category and amount of physical activity.

- Generally, children that were physically active less often (1-2 times per week) were more likely to be underweight or obese and were less likely to be a healthy weight, as compared to children that were physically active throughout the week (6-7 times per week).

**Figure 12.2: Child's Weight Status Category by Amount of Physically Active Per Week**

(2010-2011  $n = 3,524$ )



### Number of Times of Physical Activity

\* These findings are significant at  $p < .001$

\*\* Percentages are calculated out of the total number in each physical activity category.

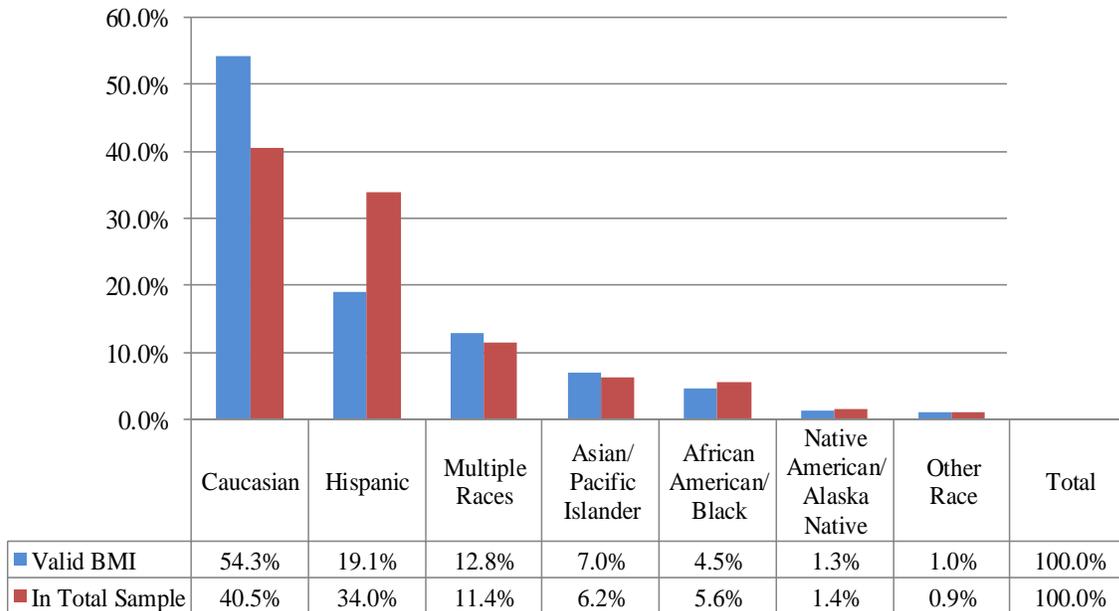
## WEIGHT AND HEALTHY BEHAVIORS

When comparing each child's race/ethnicity with his or her BMI, we can see some differences in distributions across weight categories for each race/ethnicity group. It is important to note that the total number of respondents included in this analysis is even fewer than those in the above statistics on valid BMI's 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 entire survey sample, with a greater concentration of Caucasian respondents eligible for this analysis and a smaller concentration of Hispanic respondents eligible. Figure 12.3 illustrates the race/ethnicity data for children with a valid BMI.

**Figure 12.3: Race/Ethnicity of Participants with a Valid Body Mass Index**

(2010-2011: Valid BMI  $n = 3,508$ ; Total  $n = 10,102$ )



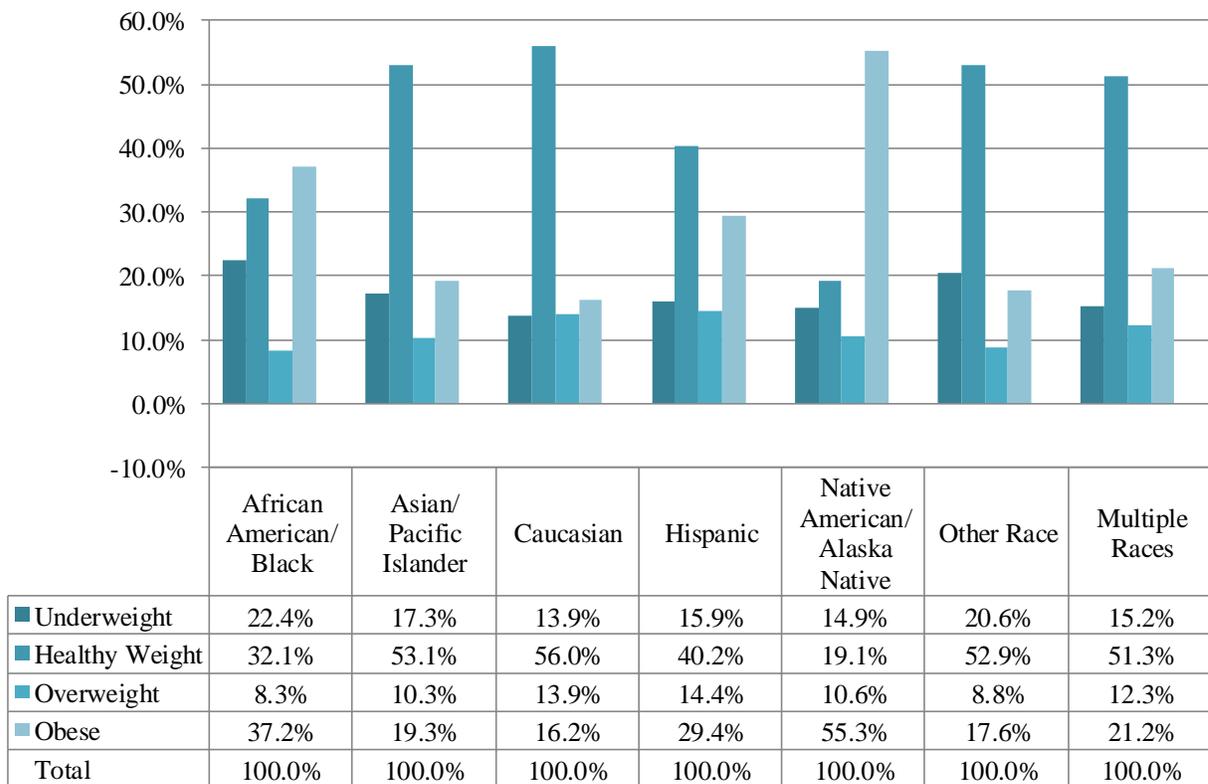
## WEIGHT AND HEALTHY BEHAVIORS

When examining difference in BMI across racial/ethnic groups:

- Native American/Alaska Native children had the highest percentage of children that were obese (55.3 percent).
- African American/Black children had a large distribution between having a healthy weight (32.1 percent) and being obese (37.2 percent).
- For Caucasian and Asian/Pacific Islander children, there were more children at a healthy weight than were overweight/obese.
- In addition, in comparing the overall percentages of the respondents that are overweight (13.2 percent) or obese (21.1 percent), **African American/Black, Hispanic, Native American/Alaska Native, and children with multiple races have significantly higher rates of overweight/obesity compared to Asian/Pacific Islander children, Caucasian children, and children of other races.** See Figure 12.4, below, for more detail.

**Figure 12.4: Child's Weight Status Category by Child's Race/Ethnicity**

(2010-2011  $n = 3,497$ )



### Race/Ethnicity

\* These findings are significant at  $p < .001$ .

\*\* Percentages are calculated out of the total number in each race/ethnicity category.

**APPEDIX A:  
SUMMARY OF 2010-2011 SURVEY RESULTS BY COUNTY**

Table 13.1 below outlines the percentages of responses for 2010-2011 school year survey results by county. Even though a total of 10,487 surveys were received, not all respondents answered every question. All percentages calculated are based on the total number of people answering the question, rather than the total number of people who completed a survey. In addition, the percentages for Table 13.1 represent percentages by county; therefore for each response category, percentages will total 100% within each county and not across all counties.

**Table 13.1 Comparison of 2010-2011 Data by County**

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Survey Participation</i>	--	65.1	14.1	20.8
<i>Demographic Information</i>				
<i>Gender of Kindergartener</i>				
Male	49.8	49.3	51.6	50.3
Female	50.2	50.7	48.4	49.7
<i>Race/Ethnicity of Kindergartener</i>				
African American/Black	5.6	7.9	2.4	0.8
Asian/Pacific Islander	6.2	7.9	4.9	1.8
Caucasian	40.5	33.3	41.5	62.0
Hispanic	34.0	37.0	38.8	21.7
Native American/ Alaska Native	1.4	0.6	2.7	2.9
Other Race	0.9	1.1	0.8	0.5
Multiple Races	11.4	12.2	9.0	10.3
<i>Annual Household Income of Survey Respondents</i>				
\$0-\$14,999	19.0	18.5	22.7	17.9
\$15,000-\$24,999	16.0	15.7	19.7	14.3
\$25,000-\$34,999	12.8	12.5	13.8	13.4
\$35,000-\$44,999	9.3	8.9	9.9	10.3
\$45,000-\$54,999	7.5	7.2	65.9	8.8
\$55,000-\$64,999	6.6	6.8	5.3	7.0
\$65,000-\$74,999	5.9	5.7	5.2	7.0
\$75,000-\$84,999	5.5	5.7	3.9	6.2
\$85,000-\$94,999	3.9	3.9	2.7	4.7
\$95,000+	13.4	15.1	10.1	10.5

APENDIX A: SUMMARY OF 2010-2011 SURVEY RESULTS BY COUNTY

Table 13.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Type of School Child Attended in the Past 12 Months</i>				
Head Start	11.2	9.2	17.6	13.3
Private	18.0	17.6	16.5	20.0
Home-Based	10.5	10.4	9.7	11.2
School/University/Campus	10.0	9.2	7.2	14.3
None/Stayed at Home	37.7	40.6	37.1	29.1
Other	10.7	10.7	10.1	10.9
Multiple	1.9	2.2	1.7	1.2
<i>Health Insurance Status and Access to Health Care</i>				
<i>Health Insurance Type</i>				
Uninsured	16.6	16.5	18.2	16.1
Private	39.4	39.4	36.3	41.4
Medicaid	22.8	21.1	27.7	24.9
Nevada Check-up	5.8	6.2	5.5	4.7
Other	13.6	15.4	9.8	10.8
Multiple Types	1.7	1.5	2.5	2.0
<i>Child Does NOT Have a Primary Care Provider</i>	18.9	18.7	20.2	18.8
<i>Types of Barriers Experienced When Trying to Access Healthcare</i>				
Lack of Transportation	2.0	2.1	2.0	1.9
Lack of Insurance	12.3	11.7	13.4	13.5
Lack of Quality Medical Providers	2.8	2.0	1.9	5.8
Lack of Money/Financial Resources	12.6	12.0	12.6	14.5
Other Barriers	1.2	1.0	1.2	1.7
<i>Reports of Experiencing Difficulties When Attempting to Access Mental Health Services for Kindergartener</i>				
Experienced Difficulties	34.7	30.5	20.4	47.0
Did Not Experience Difficulties	65.0	69.5	79.6	53.0

APENDIX A: SUMMARY OF 2010-2011 SURVEY RESULTS BY COUNTY

Table 13.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Routine Care and Health Status of Kindergartener</i>				
<i>Has Not Had Routine Check-Up</i>	15.8	15.1	16.4	17.7
<i>Has Not Visited a Dentist in the Last Year</i>	28.9	30.2	24.6	27.5
<i>Has Had a Cavity in Lifetime</i>	44.1	41.8	50.3	46.7
<i>Amount of Times the Kindergartener Has Gone to the ER for a Non-Life-Threatening Illness or Injury in the Past 12 Months</i>				
None (0)	80.6	82.1	81.8	75.2
1 to 2	18.1	16.8	16.9	22.8
3 to 5	1.1	0.9	1.2	1.7
6 to 9	0.1	0.1	0.1	0.2
10 or More	0.1	0.1	0.1	0.1
<i>Types of Medical Conditions Seen in Kindergarteners</i>				
Asthma	8.2	8.3	8.5	7.4
Glasses/Contacts	4.2	3.6	4.3	5.7
ADD/ADHD	1.0	0.7	1.2	1.5
Seizures	0.8	0.7	0.9	1.0
Hearing Aid/Impairment	0.4	0.3	0.6	0.4
Physical Disability	0.3	0.2	0.3	0.3
Mental Health Condition	0.3	0.2	0.2	0.8
Diabetes	0.4	0.1	0.1	0.2
Cancer	0.2	0.2	0.1	0.1
Other Condition	7.4	7.1	6.5	9.9
<i>Respondents Ability to Follow Doctor's Recommendations for Medications and/or Follow-Up Visits</i>				
All of the Time	84.3	84.1	85.4	83.9
Most of the Time	10.3	10.0	9.1	12.1
Some of the Time	2.8	2.9	2.8	2.3
Never	2.6	2.9	2.8	1.7
<i>Has NOT Been Tested for Lead Poisoning</i>	79.9	78.9	81.1	82.5

APENDIX A: SUMMARY OF 2010-2011 SURVEY RESULTS BY COUNTY

Table 13.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<b><i>Immunization Information</i></b>				
<i>Would Not Immunize if it was Not Required</i>	6.5	6.4	6.2	6.8
<b><i>Immunization Locations Used by Respondents</i></b>				
Primary Care Provider	68.1	69.1	66.5	66.0
Health District	12.0	15.3	10.9	2.7
School-based Clinic	0.6	0.7	0.3	0.8
Community Health Clinic	9.8	5.5	13.9	20.3
Other Location	2.2	2.2	2.5	2.2
Multiple Locations	7.2	7.1	6.1	8.1
<b><i>Kindergartener's Weight Status</i></b>				
Underweight	15.4	15.6	18.3	13.3
Healthy Weight	50.3	50.5	44.3	52.6
Overweight	13.2	12.9	13.6	13.9
Obese	21.3	21.0	23.8	20.1
<b><i>Amount of Times per Week that Child Has at Least 30 Minutes of Physical Activity</i></b>				
0-1 Times	2.6	3.2	1.7	1.2
2-3 Times	16.3	19.1	14.1	8.7
4-5 Times	27.2	29.1	24.1	23.3
6 or More Times	54.0	48.6	60.1	66.7

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

Table 13.2 below outlines the percentages of responses for the 2008-2009, 2009-2010, and 2010-2011 school year survey results. Even though a total of 10,487 surveys were received, not all respondents answered every question. All percentages calculated are based on the total number of people answering the question, rather than the total number of people who completed a survey. In addition, the percentages for Table 13.2 represent percentages by year; therefore for each response category, percentages will total 100% within each year and not across all years.

**Table 13.2 Comparison of 2008-2009 through 2010-2011 Data**

Survey Indicator	2008-2009 (Year One) (Percent)	2009-2010 (Year Two) (Percent)	2010-2011 (Year Three) (Percent)
<i><b>Survey Participation by School District</b></i>			
Clark County	78.9	59	65.1
Washoe County	8.8	17.6	14.1
Rural Counties	12.4	23.4	20.8
<i><b>Demographic Information</b></i>			
<i>Gender of Kindergartener</i>			
Male	50.2	49.8	49.8
Female	49.8	50.2	50.2
<i>Race/Ethnicity of Kindergartener</i>			
African American/Black	5.9	5.7	5.6
Asian/Pacific Islander	6	6.3	6.2
Caucasian	40.1	43.5	40.5
Hispanic	33.4	35.1	34
Native American/Alaska Native	0.9	2.1	1.4
Other Race	0.4	0.5	0.9
Multiple Races	13.4	6.7	11.4
<i>Annual Household Income of Survey Respondent</i>			
\$0-\$14,999	12.9	15.7	19
\$15,000-\$24,000	14.3	14.5	16
\$25,000-\$34,999	13.8	13.1	12.8
\$35,000-\$44,999	9.8	9.2	9.3
\$45,000-\$54,000	9.1	8.2	7.5
\$55,000-\$64,999	7.5	6.9	6.6
\$65,000-\$74,999	-	7.2	5.9
\$75,000-\$84,999	-	6.4	5.5
\$85,000-94,999	-	4.6	3.9
\$95,000 +	-	14.3	13.4

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 13.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>
<i>Type of School Child Attended in the Past 12 Months</i>			
Head Start	-	12.6	11.2
Private	-	21.3	18
Home-Based	-	8.2	10.5
School/University/Campus	-	7.2	10
None/Stayed at Home	-	38.2	37.7
Other	-	9.8	10.7
Multiple	-	2.8	1.9
<i>Health Insurance Status and Access to Health Care</i>			
<i>Health Insurance Type</i>			
Uninsured	19.1	18.6	16.6
Private	58.6	47.6	39.4
Medicaid	12.3	16.7	22.8
Nevada Check-Up	7.0	6.1	5.8
Other	1.7	9.1	13.6
Multiple Types	1.3	1.9	1.7
<i>Kindergartener Does Not Have a Primary Care Provider</i>	21	19.5	18.9
<i>Types of Barriers Experienced When Trying to Access Healthcare</i>			
Lack of Transportation	1.5	2.2	2
Lack of Insurance	10.9	13.3	12.3
Lack of Quality Medical Providers	2.4	3	2.8
Lack of Money/Financial Resources	10.9	10	12.6
Other Barriers	1.1	1.3	1.2
<i>Respondent Has Experienced Difficulties Attempting to Access Mental Health Services for Kindergartener</i>	34.5	32.2	34.7

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

Table 13.2 *continued*

Survey Indicator	2008-2009 (Year One) (Percent)	2009-2010 (Year Two) (Percent)	2010-2011 (Year Three) (Percent)
<b><i>Annual Household Income of Uninsured Kindergarteners</i></b>			
\$0-\$14,999	26.4	26.3	26.9
\$15,000-\$24,999	26.1	25.8	28.4
\$25,000-\$34,999	19.3	18.9	17.2
\$35,000-\$44,999	11.5	10.9	10.7
\$45,000-\$54,999	7.1	6.4	6.3
\$55,000-\$64,999	3.8	4.2	3.8
\$65,000-\$74,999	-	3.6	2.2
\$75,000-\$84,999	-	2	1.7
\$85,000-94,999	-	0.5	0.7
\$95,000 +	-	1.5	2
<b><i>Race/Ethnicity of Uninsured Kindergarteners</i></b>			
African American/Black	3.8	4.9	5.9
Asian/Pacific Islander	3.9	4.2	6.4
Caucasian	22.7	26.6	43.4
Hispanic	58.6	55.5	30.1
Native American/Alaska Native	1.2	2.2	1.3
Other Race	0.5	0.4	1
Multiple Races	9.3	6.2	11.9
<b><i>Routine Care and Health Status of Kindergartener</i></b>			
<i>Kindergartener Has NOT Had Routine Check-Up In Past Year</i>	17.1	16.3	15.8
<i>Kindergartener Has NOT Visited Dentist in Past Year</i>	32.5	29.7	28.9
<i>HAS Had a Cavity in His/Her Lifetime</i>	--	43.9	44.1
<b><i>Amount of Times the Kindergartener Has Gone to the ER for a Non-Life-Threatening Illness or Injury in the Past 12 Months</i></b>			
None (0)	75.2	80	80.6
1 to 2	22.6	18.6	18.1
3 to 5	2.1	1.3	1.1
6 to 9	0.2	0	0.1
10 or More	0.1	0.1	0.1

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 13.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>
<i>Types of Medical Conditions Seen in Kindergarteners</i>			
Asthma	4.8	8.2	8.2
Glasses/Contacts	2.1	3.6	4.2
ADD/ADHD	0.7	1.2	1
Seizures	0.2	0.9	0.8
Hearing Aid/Impairment	0.5	0.4	0.4
Physical Disability	0.2	0.3	0.3
Mental Health Condition	0.2	0.3	0.3
Diabetes	0.1	0.2	0.4
Cancer	0.04	0.1	0.1
Other Condition	5.1	7.4	7.4
<i>Kindergartener with No Insurance Has a Possible Undiagnosed Medical Condition</i>	2.2	3.4	3.3
<i>Respondents Ability to Follow Doctor's Recommendations for Medications and/or Follow-Up Visits</i>			
All of the time	83.7	86.2	84.3
Most of the time	12.4	7	10.3
Some of the time	2.5	4.5	2.8
Never	1.4	2.3	2.6
<i>Kindergartener Has NOT Been Tested for Lead Poisoning</i>	83.9	83.2	79.9
<b><i>Immunization Information</i></b>			
<i>Respondent Would Not Immunize Kindergartener if it Was Not Required</i>			
	5.6	5.5	6.5
<i>Immunization Locations Used by Respondent</i>			
Primary Care Provider	65.6	67.3	68.1
Health District	16.5	11.7	12
School-based Clinic	1.7	0.9	0.6
Community Health Clinic	8.7	10.4	9.8
Other Location	7.5	2.5	2.2
Multiple Locations	-	7.2	7.2

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

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**Table 13.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>
<i>Kindergartener's Weight Status</i>			
Underweight	16.8	16.4	15.4
Healthy Weight	47.5	47.8	50.3
Overweight	10.8	10.5	13.2
Obese	24.9	25.3	21.1
<i>Times A Week Kindergartner Does at Last 30min of Physical Activity</i>			
0-1 Times	-	2.5	2.6
2-3 Times	-	14.2	16.3
4-5 Times	-	25.5	27.2
6 or More Times	-	57.9	54

Note. – indicates data is not available.

# APPENDIX C: SURVEY INSTRUMENT



## 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 District. 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 will have a child in kindergarten. All information from this survey will be used to discuss children's health on a group level. Your child's name will never be connected to your responses in any way or known by the researchers. All information in this survey is confidential.

Child's age: \_\_\_\_\_

Name of elementary school: \_\_\_\_\_

Child's gender: Male Female

Child's weight: \_\_\_\_\_ lbs.

Child's height: \_\_\_\_\_ ft. \_\_\_\_\_ in. (12in = 1ft)

Total number of children in your household: (ages 0-17): \_\_\_\_\_

Total number of adults in your household: (ages 18+): \_\_\_\_\_

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 +

Your HOME zip code: \_\_\_\_\_

Child's race / ethnicity:

African American

Asian / Pacific Islander

Caucasian

Hispano / Latino

Native American / Alaska Native

Other (please specify): \_\_\_\_\_

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

1. Is your child currently covered by medical insurance?  
 Yes  No  
 If "Yes", what is the type of insurance?  
 Private  Medicaid  Nevada Check-Up  
 Other \_\_\_\_\_

2. Has your child been seen by a medical provider for a routine check-up (not an illness) in the past 12 months?  
 Yes  No

3. Does your child have a primary care provider (regular doctor, nurse practitioner, or physician's assistant)?  
 Yes  No

4. Has your child seen a dentist in the past 12 months?  
 Yes  No

5. Has your child ever had a cavity?  Yes  No

6. Within the last 12 months, how many times have you taken your child to the Emergency Room (not Urgent Care) for an illness or injury that was not life-threatening?  
 None (0)  1-2  3-5  6-9  10 or more

7. Please check all medical conditions listed below that your child has:  
 Asthma  Glasses / Contacts  
 Diabetes  Hearing Aid / Impairment  
 Seizures  Physical Disability  
 Mental Health Condition  ADD / ADHD  
 Cancer  None  
 Other (specify) \_\_\_\_\_

8. Do you think your child may have a medical problem that he/she has not seen a doctor for?  
 Yes  No  
 If "Yes", what is it: \_\_\_\_\_

9. If immunizations were not required for school, would you still have your child immunized?  
 Yes  No

10. Where do you take your child for immunizations (shots)? If you have used more than one of these locations, please check the last location:  
 Primary Care Provider (Child's regular doctor)  
 Health District  
 Community Health Clinic  
 School-based clinic  
 Other (specify): \_\_\_\_\_

11. Has your child ever been tested for lead poisoning?  
 Yes  No

12. Have you experienced any barriers to accessing health care for your child? (check all that apply)  
 None  Lack of transportation  
 Lack of insurance  Lack of good medical providers  
 Lack of money  Other (specify): \_\_\_\_\_

13. Have you ever tried to get mental or behavioral health services for your child?  
 Yes  No  
 If "Yes", have you had trouble getting services?  
 Yes (explain) \_\_\_\_\_  No

14. In general, are you able to follow your doctor's recommendations for medications and/or follow-up visits?  
 All of the time  Some of the time  
 Most of the time  Never  
 If you did not say "All of the time", please explain why not: \_\_\_\_\_

15. In general, how many times a week does your child do at least 30 minutes of physical activity? (circle one)  
 0 1 2 3 4 5 6 7

16. What type of pre-school did your child attend most often in the past 12 months? (check one)  
 Home-based  School / University campus  
 Head start  Private  None / Stayed home  
 Other \_\_\_\_\_

17. What is the name of the pre-school that your child most recently attended (if he/she attended)? \_\_\_\_\_

**PLEASE RETURN THIS SURVEY TO YOUR CHILD'S TEACHER BY FRIDAY, SEPTEMBER 10, 2010**

Thank you for your participation. If you are interested in participating in future research, please contact the Nevada Institute for Children's Research and Policy at (702) 895-1040 or via email at nicrp@unlv.nevada.edu.

**TEACHERS:** Please return the survey to your school's front office, or mail to:

**NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154**

# APPENDIX C: SURVEY INSTRUMENT



## Cuestionario de Salud de Kinder

**ESTIMADOS PADRES DE FAMILIA O GUARDIAN:** La siguiente encuesta ha sido diseñada por Nevada Institute for Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboración con el Centro de Salud de Sur de Nevada y el Distrito Escolar del Condado. La información adquirida en este estudio se utilizará para ayudar a comprender la salud de los niños que comienzan la escuela preescolar este año. Le hemos pedido que participe porque usted tiene un niño en la escuela preescolar. Toda la información obtenida será utilizada para discutir y estudiar el nivel de salud colectiva del grupo. Nunca habrá conexión entre el nombre de su niño(a) y sus respuestas. Toda información en este estudio será confidencial.

Edad del niño(a): _____	Ingreso anual del hogar (cheque uno)	Su código postal CASERO: _____
Nombre de la escuela primaria: _____	<input type="checkbox"/> \$0-\$14,999	Etnicidad del Niño(a)
Sexo del niño(a): Masculino    Femenino	<input type="checkbox"/> \$15,000-\$24,999	<input type="checkbox"/> Afro Americano
Peso del niño(a) : _____ lbs.	<input type="checkbox"/> \$25,000-\$34,999	<input type="checkbox"/> Asiático / Isleño Pacífico
Estatura del niño(a): _____ ft. _____ in. (12in = 1ft)	<input type="checkbox"/> \$35,000-\$44,999	<input type="checkbox"/> Caucásico
Total de niños(as) viviendo en casa: (edades 0-17): _____	<input type="checkbox"/> \$45,000-\$54,999	<input type="checkbox"/> Hispano / Latino
Total de adultos viviendo en casa: (edades 18+): _____	<input type="checkbox"/> \$55,000-\$64,999	<input type="checkbox"/> Nativo Americano / Nativo de Alaska
	<input type="checkbox"/> \$65,000-\$74,999	<input type="checkbox"/> Otro (especifique): _____
	<input type="checkbox"/> \$75,000-\$84,999	
	<input type="checkbox"/> \$85,000-\$94,999	
	<input type="checkbox"/> \$95,000 +	

Por favor conteste las siguientes preguntas sobre el niño(a) que se va a matricular en kinder este año.

- ¿Su niño(a) en este momento cuenta con seguro médico?
  - Si     No
  - ¿Encaso de sí? ¿que tipo de seguro?
    - Privado     Medicaid     Nevada Check-Up
    - Otro \_\_\_\_\_
- ¿Su niño(a) ha sido visto por un proveedor de servicio médico este año para un examen de rutina (no por enfermedad) en los últimos 12 meses?
  - Si     No
- ¿Tiene su niño(a) un médico familiar (médico, enfermera de práctica o asistente de médico)?
  - Si     No
- ¿Ha visto su niño(a) a un dentista en los últimos 12 meses?
  - Si     No
- ¿Ha tenido su niño(a) caries?     Si     No
- En los últimos 12 meses, ¿cuántas veces ha tenido que llevar a su niño(a) a la sala de emergencias por una enfermedad o lesión sin peligro la vida?
  - Ninguna (0)     1-2     3-5     6-9     10 o mas
- Por favor seleccione todas las condiciones medicas que tenga su niño(a):
  - Asma                                     Lentas/ de Contacto
  - Diabetes                                 Oído/Discapacidad Auditiva
  - Convulsiones                           Discapacidad física
  - Condición de Salud Mental         ADD/ADHD
  - Cáncer                                    Ninguno
  - Otra (especifique) \_\_\_\_\_
- ¿Cree que su niño(a) tenga un problema médico pero usted no ha ido a ver a un médico?
  - Si     No
  - Si la respuesta es si, por favor especifique: \_\_\_\_\_
- Si las vacunas no fueran necesarias para la escuela, ¿Vacunaría (inmunizaciones) a su niño?
  - Si     No
- ¿Dónde lleva a su hijo para inmunizaciones (vacunas)? Si ha utilizado más de un tipo de local, por favor, indique la más reciente:
  - Proveedor cuidado primario     Centro de Salud (médico regular)
  - Clínica de salud basada en la escuela
  - Clínica de Salud Comunitaria     Otro (especifique): \_\_\_\_\_
- ¿A sido su niño(a) examinado por contaminación de plomo?
  - Si     No
- ¿Se ha enfrentado con obstáculos en el acceso de salud para su hijo? (cheque todo que apliqué)
  - Ninguno     Falta de transportacion
  - Falta de aseguransa     Falta de proveedores médicos de calidad
  - Falta de of dinero     Otro (especifique): \_\_\_\_\_
- ¿Alguna vez ha tratado de obtener servicio de salud mental o de comportamiento para su niño(a)?
  - Si     No
  - En caso que sí, ¿ha tenido problemas para obtener servicios?
    - Si (especifique) \_\_\_\_\_     No
- En general, ¿Puede seguir recomendaciones del médico en cuanto a medicamentos o seguimiento de las visitas?
  - Todo el tiempo                         Algunas veces
  - La mayor parte del tiempo         Nunca
  - Si no contesto "Todo el tiempo", por favor especifique porque: \_\_\_\_\_
- En general, ¿Cuantas veces a la semana hace su niño(a) por lo menos 30 minutos de actividad física? (circule uno)
 

0	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---
- ¿Que tipo de escuela preescolar atendio su niño(a) mas en los ultimos 12 meses? (cheque uno)
  - Badado en Casa     Campamento en Escuela/Universidad
  - Head start     Privada     Ninguna/Permaneció en la Casa
  - Otra \_\_\_\_\_
- ¿Qué es el nombre de la escuela preescolar que su hijo más recientemente atendió a (si atendió alguna)? \_\_\_\_\_

**VUELVA POR FAVOR ESTA INSPECCION A MAESTRO DE SU NIÑO POR EL VIERNES, SEPTIEMBRE 10, 2010**

Gracias por su participación. Si esta interesado en participar en investigaciones futuras por favor contacte al Nevada Institute for Children's Research and Policy al (702) 895-1040 o por email al nicrp@unlv.nevada.edu .

TEACHERS: Please return the survey to your school's front office, or mail to:  
NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154

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# Health Status of Children Entering Kindergarten in Nevada



**Results of the  
2011-2012  
(Year 4)**

**Nevada  
Kindergarten  
Health Survey**

**March 2012**

**This project was completed in collaboration with the following:**

All Nevada County School Districts  
Nevada School District Superintendents  
Nevada State Health Division  
Head Start Collaboration & Early Childhood Systems Office

This publication was supported in part by the Nevada State Health Division through Grant Number BO4MC21394 from the Health Resources and Services Administration.

Nevada Institute For Children's Research & Policy

**NICRP**

**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

SCHOOL OF COMMUNITY HEALTH SCIENCES

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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 Community Health Sciences, 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 didn't want to stop there; she wanted to transform that research into meaningful legislation that would make a real difference in the lives of our children.

**NICRP's Mission:** The Nevada Institute for Children's Research and Policy (NICRP) looks out for Nevada's children. 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: <http://www.nic.unlv.edu>

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## EXECUTIVE SUMMARY

To gather additional 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 State Health Division, conducted a health survey of children entering kindergarten in Nevada. The goal of this study is to

- longitudinally quantify the health status of children as they enter school,
- identify specific areas for improvement to potentially increase academic success, and
- provide local information to policy makers to guide decisions that impact children’s health.

In the fall of 2011, NICRP distributed questionnaires to all public elementary schools in the state, with the exception of the Clark County School District, who requested only a sample of their schools be included in the survey. The survey had an overall response rate of 36.3 percent, with a total of 8,534 surveys received from parents in 17 school districts statewide. This response rate is approximately 7 percentage points lower compared to the previous year’s survey (43.4%). Survey respondents from Clark County comprised 64.3 percent of the sample, while 12.3 percent of respondents were from Washoe County and 23.4 percent were from the remaining rural counties.

The following tables contain some of the key findings of this survey.

**Household Income:** The number of families in the lower income brackets decreased while the number of families in the higher income brackets increased, representing an overall increase in household income.

	2010-2011	2011-2012	Difference	*
<b>Household Income</b>				
Less than \$25,000 per year	35.0%	32.4%	-2.6%	▼
Less than \$45,000 per year	57.1%	54.3%	-2.8%	▼
\$45,000 or more per year	42.9%	45.7%	+2.8%	▲

**Note.** \*Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±.5%).

**Insurance Status:** Although 12.3 percent of kindergartners were still not covered by health insurance, the percentage of children without insurance has decreased by 4.3 percentage points since last year.

	2010-2011	2011-2012	Difference	*
<b>Insurance Status</b>				
Uninsured	16.6%	12.3%	-4.3%	▼
Private Insurance	39.4%	48.8%	+9.4%	▲
Medicaid	22.8%	23.6%	+0.8%	▲
Nevada Check-up	5.8%	6.4%	+0.6%	▲

**Note.** \* Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±.5%).

**Routine Care:** Respondents reported an increase in participation in routine care, including annual check-ups and dental visits.

	2010-2011	2011-2012	Difference	*
<b>Routine Care</b>				
Had a routine medical checkup in last 12 months	84.2%	86.2%	+2.0%	▲
Have a primary care provider	81.1%	84.1%	+3.0%	▲
Have been to the dentist in past 12 months	71.1%	72.9%	+1.8%	▲

**Note.** \* Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±.5%).

## EXECUTIVE SUMMARY

**Access to Health Care:** The number of respondents reporting barriers to accessing health care increased this year in every category except “lack of insurance.” Unlike last year, there was no significant difference between individuals in rural areas and those in Clark or Washoe County with regard to difficulty obtaining mental health services.

	2010-2011	2011-2012	Difference	*
<b>Barriers to Accessing Health Care*</b>				
None	80.2%	77.2%	-3.0%	▼
Lack of Transportation	2.0%	3.1%	+1.1%	▲
Lack of Insurance	12.3%	11.1%	-1.2%	▼
Lack of Quality Medical Providers	2.8%	4.6%	+1.8%	▲
Lack of Money/Financial Resources	12.6%	13.1%	+0.5%	▲
Other Barriers	1.2%	1.5%	+0.3%	↔
<b>Mental Health</b>				
Have tried to access services	4.1%	4.2%	+0.1%	↔
Had trouble obtaining services	34.7%	29.3%	-5.4%	▼

Note: \*Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±.5%). \*\*Since respondents could select more than one barrier, totals may add up to more than 100%.

**Health Status:** Overall, respondents have reported slightly less chronic medical conditions for their children and weight status has become healthier.

	2010-2011	2011-2012	Difference	*
<b>Health Status</b>				
Have a medical condition requiring special treatment	19.7%	18.6%	-1.1%	▼
<b>Weight Status</b>				
Underweight	15.0%	14.9%	-0.1%	↔
Healthy	51.5%	54.3%	+2.8%	▲
Overweight/Obese	33.6%	30.8%	-2.8%	▼
<b>Physical Activity</b>				
≤3 days per week of 30-minutes of physical activity	18.9%	17.7%	-1.2%	▼
<b>Television Viewing on School Days</b>				
2 hours or less of television watched per school day	-	78.4%	-	
3 hours or more of television watched per school day	-	21.6%	-	
<b>Computer/Video Game Play on School Days</b>				
≤ 1 of computer/ video games played per school day	-	90.3%	-	
<b>Consumption of Non-Diet Soda</b>				
Never drink non-diet soda	-	55.0%	-	
Drink non-diet soda once a day or more	-	10.8%	-	
<b>Consumption of Diet Soda</b>				
Never drink diet soda	-	82.0%	-	
Drink diet soda once a day or more	-	3.3%	-	

Note. \*Green arrows = positive change, red arrows = negative change, and yellow arrows = no change (< ±.5%).

*For more detailed information on all survey items, please see Appendix B of the full report.*

*Data for specific counties (and/or schools for Washoe and Clark Counties) may also be available upon request. Please contact NICRP at (702) 895-1040 for additional information.*

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## INTRODUCTION

Academic achievement for children is vital to their success in life. Those that do well in school have greater opportunities for post-secondary education, and later have better prospects for employment. One of the major factors that can affect a child's academic achievement is his or her health status. Academic outcomes and health conditions are consistently linked in the literature (Eide, Showalter, & Goldhaber, 2010; Taras & Potts-Datema, 2005). Children with poor health status, and especially those with common chronic health conditions, have increased numbers of school absences and more academic deficiencies than those students with a good health status (Taras & Potts-Datema, 2005). In addition, children that have health insurance have fewer absences from school, as compared to children without health insurance (Yeung, Gunton, Kalbacher, Seltzer, & Wesolowski, 2010). In a study examining school absences, when compared with children with low absenteeism, overall children with more absenteeism had lower academic performance, and those with excused absences performed better than those with unexcused absences (Gottfried, 2009). Therefore, to increase the likelihood for academic success in children, we need address their health concerns. Preventative care is crucial to a child's ability to succeed in school.

According to data from the KIDS COUNT Data Center at the Annie E. Casey Foundation (2010), 10 percent of Nevada's teens (ages 16-19) are not in school and not high school graduates compared to 6 percent nationally. The national dropout prevention center lists poor attendance and low achievement as two of the significant risk factors for school dropout (Hammond, Linton, Smink, & Drew, 2007). Additionally, studies examining school dropout rates indicate that early intervention is necessary to prevent students from dropping out of school. Middle and high school students that drop out likely stopped being engaged in school much earlier in their academic career. Therefore, early prevention and intervention is crucial to improving graduation rates. Ensuring that children have their basic needs met, including receiving adequate health care, can directly impact a child's academic achievement as well as increase their likelihood for high school graduation.

To gain information on the health status of children entering the school system and better track student health status, in 2008, the Nevada Institute for Children's Research and Policy (NICRP) partnered with the state's 17 school districts, the Southern Nevada Health District, and the Nevada State Health Division (NSHD) to conduct an annual health survey examining the health status as well as health insurance status of Nevada's children entering kindergarten.

The goal of this study is to longitudinally quantify the health status of children as they enter school to be able to identify specific areas for improvement to potentially increase academic success among Nevada's students. This report reflects the results of the fourth year of the Annual Kindergarten Health Survey.

## METHODOLOGY

The original survey used in this study was created in 2008 in partnership with the Clark County School District (CCSD) and the Southern Nevada Health District (SNHD). The survey was intended to provide a general understanding of the overall health status of children when they

# INTRODUCTION

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enter school. The original short questionnaire was developed in both English and Spanish and contained 22 questions. Small revisions to the survey have occurred each year; therefore, data for all items presented in this report may not be available for all four years. The current version of the survey is still available in both English and Spanish and contains 29 questions (13 demographic questions and 16 health related questions).

In the Fall of 2011, questionnaires were distributed to kindergarten teachers in all public elementary schools in the state, with the exception of schools in the Clark County School District. The Clark County School District requested that only a sample of their schools be included in the survey to reduce burden on school staff. Therefore, surveys were sent to a randomly selected sample of schools ( $n = 139$ ) in this district. This sample size was determined based on a 5 percent margin of error in survey results. In addition, schools were divided by Title I status, and a representative random sample of both Title I and non-Title I schools were selected. Schools qualify as Title I when they serve large populations of children from low income families (typically a minimum of 40%) and receive supplemental federal funding from the Department of Education. Title I status was provided by the Clark County School District. It was determined that 73 of the 215 elementary schools in the district (34%) were Title I schools. Forty-seven schools (34 percent of the target 139 schools in the sample) were randomly selected from a list of all Title I schools using the statistical analysis program SPSS (Statistical Package for the Social Sciences). The remaining 92 schools (66 percent of the needed sample of 139) were randomly selected from a list of non-Title I schools.

For all school districts in Nevada, surveys were distributed to parents during the first part of the school year. Parents who chose to participate then turned in the survey to either the school office or their child's teacher. The surveys were then returned to NICRP via mail.

Each survey was assigned a unique identification number by NICRP staff to aid in tracking of survey responses. All survey responses received as of January 1, 2012 were entered into the statistical analysis software PASW Statistics 18.0. The surveys completed in Spanish were entered into the English database by a bilingual staff member at NICRP. No identifying information was included on any of the surveys.

## 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 relies on the memory and honesty of the respondents in the survey. Additionally, several of the responses were left blank on the surveys received. NICRP kept all surveys in the database used for analysis, but it is important to note when reading percentages presented in the figures below that not all respondents answered all questions. Some figures may have a total of 8,534 (indicating all who responded to the question), while others may have a smaller number of total cases because of respondents leaving that particular question blank. All percentages calculated for this report are based on the total number of people answering the question, rather than the total number of people who completed a survey.

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## SURVEY RESULTS

Presented in the figures below are the basic frequencies (counts and percentages) for all questions asked in the survey. Cross tabulations were also calculated for selected variables to provide additional information on specific topics. A chi-square statistic was also calculated to test for the statistical significance of the differences provided in the cross tabulation tables. Percentage calculations as well as statistical significance are presented with figures, as appropriate. In addition, the 2011-2012 data were compared across counties for the current data collection period (Clark, Washoe, Rural), and with data from the previous three years.

### RESPONSE RATES

Each school district involved in this study provided the total number of kindergarten students enrolled for the 2011-2012 school year. A total of 23,538 surveys were sent out to participating schools. At the end of the data collection period (January 2012), 8,534 surveys were received for a **response rate of 36.3 percent**. While the response rate had steadily improved for each of the previous years (2008-2009 = 36.0%; 2009-2010 = 39.2%; 2010-2011 = 43.6%), the response rate for the current year experienced a significant decline. It is hypothesized that this may in part be due to survey dissemination difficulties. Several counties reported that they had either not received their surveys or received surveys later than usual during this project year, resulting in an inability to distribute surveys appropriately. In order to improve response rates in upcoming years, NICRP plans to disseminate surveys to the school districts early in the summer which should alleviate some of these issues.

Response rates for each school district ranged from 20 percent in Lincoln County to 100 percent in Esmeralda County, and are detailed in Table 1.1 below.

**Table 1.1: Survey Response Rate by School District**

School District	# Surveys Sent Out	# Surveys Returned	Response Rate
Carson City	550	361	65.6
Churchill County	300	170	56.7
Clark County	15,248	5,488	36.0
Douglas County	500	220	44.0
Elko County	656	388	59.1
Esmeralda County	8	8	100.0
Eureka County	20	6	30.0
Humboldt County	310	181	58.4
Lander County	100	49	49.0
Lincoln County	50	10	20.0
Lyon County	650	293	45.1
Mineral County	35	24	68.6
Nye County	500	181	36.2
Pershing County	50	25	50.0
Storey County	40	20	50.0
Washoe County	4,421	1,051	23.8
White Pine County	100	59	59.0
<i>All Districts</i>	23,538	8,534	36.3

## RESPONSE RATES

Figure 1.1 illustrates the participation of Washoe, Clark and Rural counties. These rates are fairly consistent with the data received from the 2010-2011 school year (Clark County = 65.1 percent; Washoe County = 14.1 percent; Rural = 20.8 percent).

Because Clark County is the largest school district in the state, it was expected that Clark County parents would comprise the vast majority (64.3 percent) of the respondents for this survey.

**Figure 1.1: Survey Participation by School District**

(2011-2012  $n = 8,534$ )

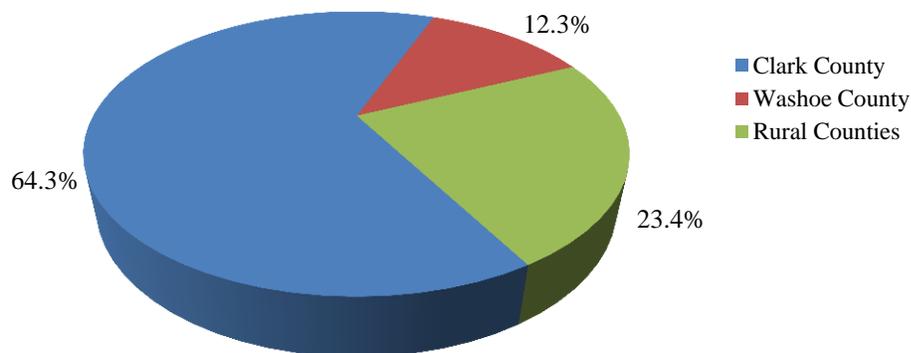
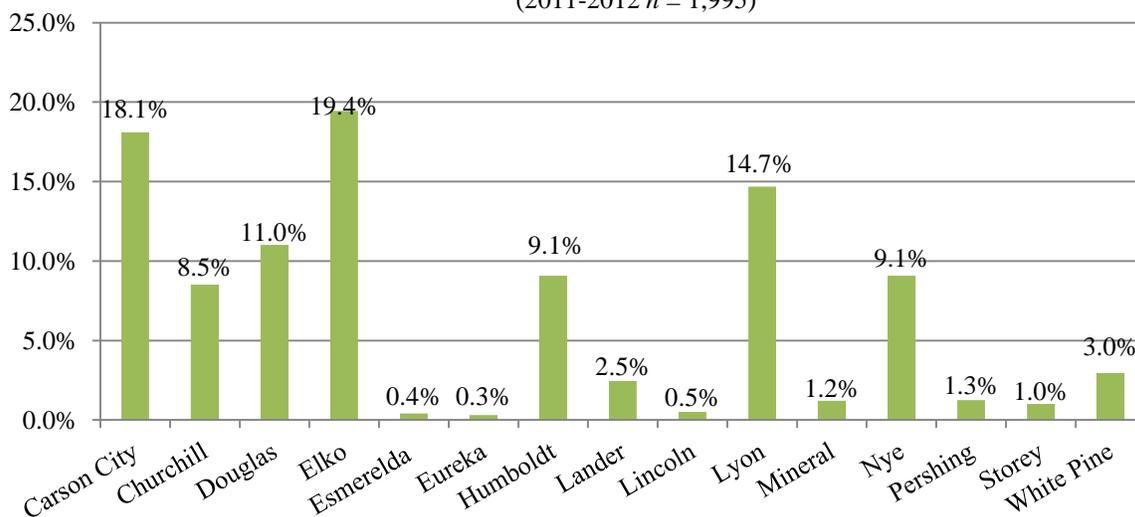


Figure 1.2 illustrates county-specific participation for all rural counties, which represent 23.4 percent of the total respondents.

**Figure 1.2: Survey Response Rate Among All Rural Counties**

(2011-2012  $n = 1,995$ )



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## DEMOGRAPHICS

The survey was created to be one page in length, with one side written in English and the reverse side written in Spanish. Of the 8,534 completed surveys, **85.2 percent completed the English version** and 14.8 percent completed the Spanish version.

Parents were asked to respond to questions regarding their annual household income, and their child's gender, race/ethnicity, and pre-school setting prior to kindergarten. Data for each of these questions are presented in Figures 2.1 through 2.3 below, with all percentages calculated using the total number of completed responses rather than the total number of returned surveys.

### *Gender*

Information on the gender of the kindergarten student was collected. Among the respondents that answered this question, the distribution was split nearly equally between males (50.6 percent) and females (49.4 percent). These results are consistent with the 2008-2009, 2009-2010, and 2010-2011 results.

### *Family Demographics*

Additional questions were added to this year's survey to describe the family and family environment of the child. The average age of the child's mother was 32.85 (SD = 6.70) and the average age of the father was 35.65 (SD = 7.52). The average number of adults living in a house averaged 2.57 (SD = 1.19) and had a range of 1 to 15 adults in the house. The average number of children living in a house averaged 2.08 (SD = .80) and had a range of 1 to 10 children in the house. Approximately 30 percent of parents indicated that they were a single parent or guardian. This information was consistent when examining the data by county (see Appendix A, Table 11.1).

### *Annual Household Income*

According to the U.S. Census Bureau, Small Area Income and Poverty Estimates, the 2009 estimated median household income in Nevada was \$53,310. 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, parents who responded to this survey reported lower annual household incomes, with 54.3 percent of all respondents reporting annual income below \$45,000.

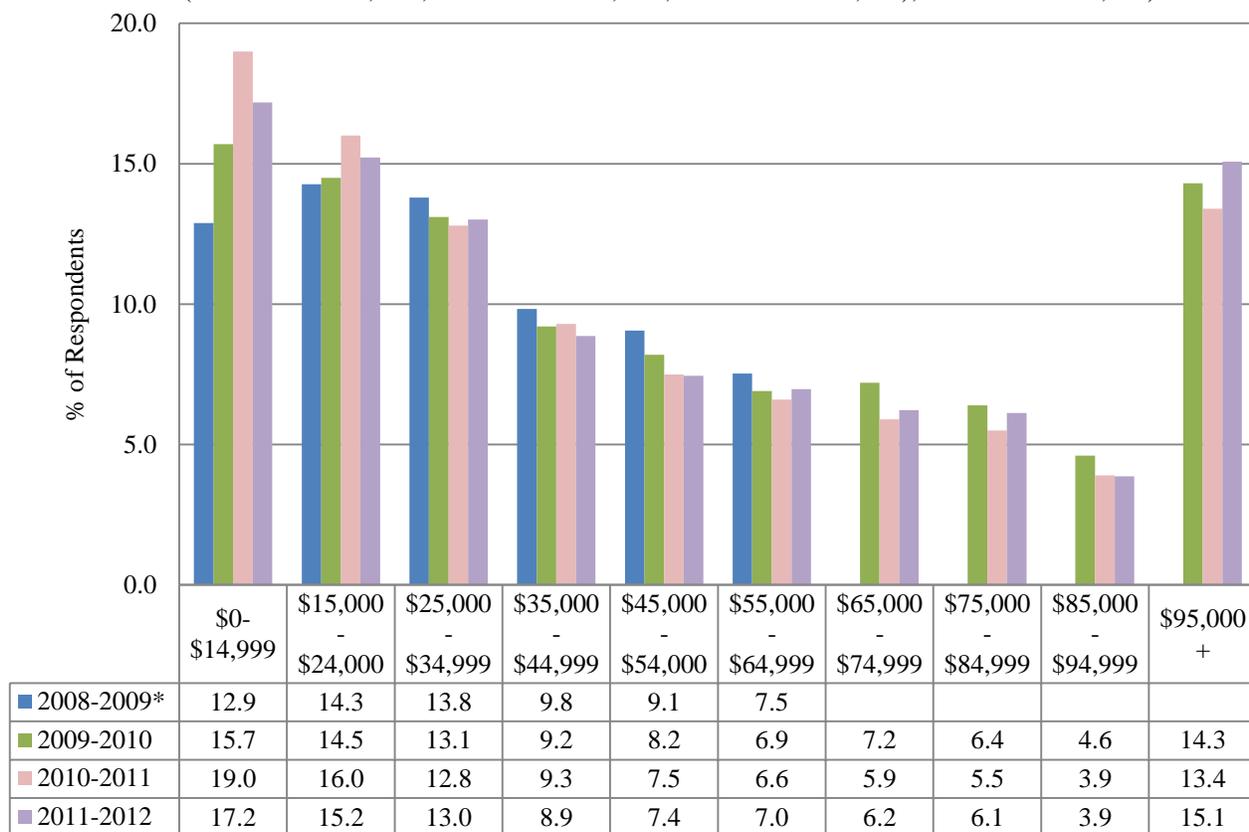
# DEMOGRAPHICS

Compared to previous survey years:

- The number of families with annual income levels below \$25,000 has decreased by 2.6 percentage points since last year. This still represents a 5.2 percentage point increase since 2008-2009.
- The number of families with an annual income at \$25,000 and above has rebounded since last year, but is still fewer than it was three years ago. About 45.7 percent of respondents reported incomes of \$45,000 or more, an increase of about 2.9 percentage points from the 2010-2011 school year, and a decrease of about 3.5 percentage points from the 2008-2009 data.
- **These results indicate that, although more families are earning more compared to the previous year of the survey, they are still earning less than they were two or three years ago.**

**Figure 2.1: Annual Household Income by School Year**

(2008-2009 n = 9,600 ; 2009-2010 n = 8,394 ; 2010-2011 n = 9,350); 2011-2012 n = 7,185)



\* Data received from the 2008-2009 school year only includes income data through \$64,999. In 2009, the survey was revised to include a breakdown of additional income levels.

# DEMOGRAPHICS

## Race/Ethnicity

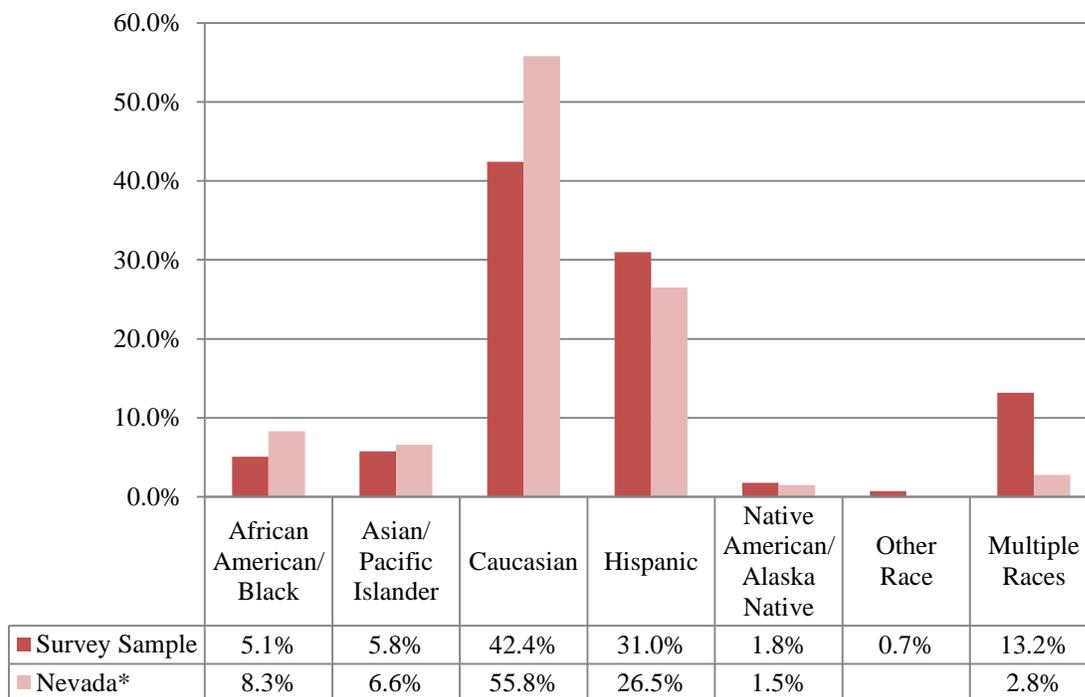
Responses indicating the race/ethnicity of the kindergartners are roughly similar in distribution to the race/ethnicity percentages most recently estimated by the U.S. Census Bureau for the entire population in Nevada (see Figure 2.2).

However, there were proportionally more people of Hispanic origin as well as people identifying with multiple races responding to this survey than seen in Nevada’s Census estimates.

Compared to previous results, there have been fluctuations across survey years in both the Native American/Alaskan Native and Multiple Races categories. When comparing results across counties for the 2011-2012 school year (refer to Table 11.1 in Appendix A), there are significantly more African American/Black and Asian/Pacific Islander individuals in Clark County compared to both Washoe and the Rural counties. In addition, there are more Native American/Alaska Native respondents in the Rural counties compared to both Clark and Washoe counties.

**Figure 2.2: Child's Race/Ethnicity**

(2011-2012 *n* = 8,422)



### Race/Ethnicity

Note. \* Nevada state data from 2009 Census QuickFacts (<http://quickfacts.census.gov>).

These distribution rates are fairly consistent with the data received from the 2010-2011 school year.

# DEMOGRAPHICS

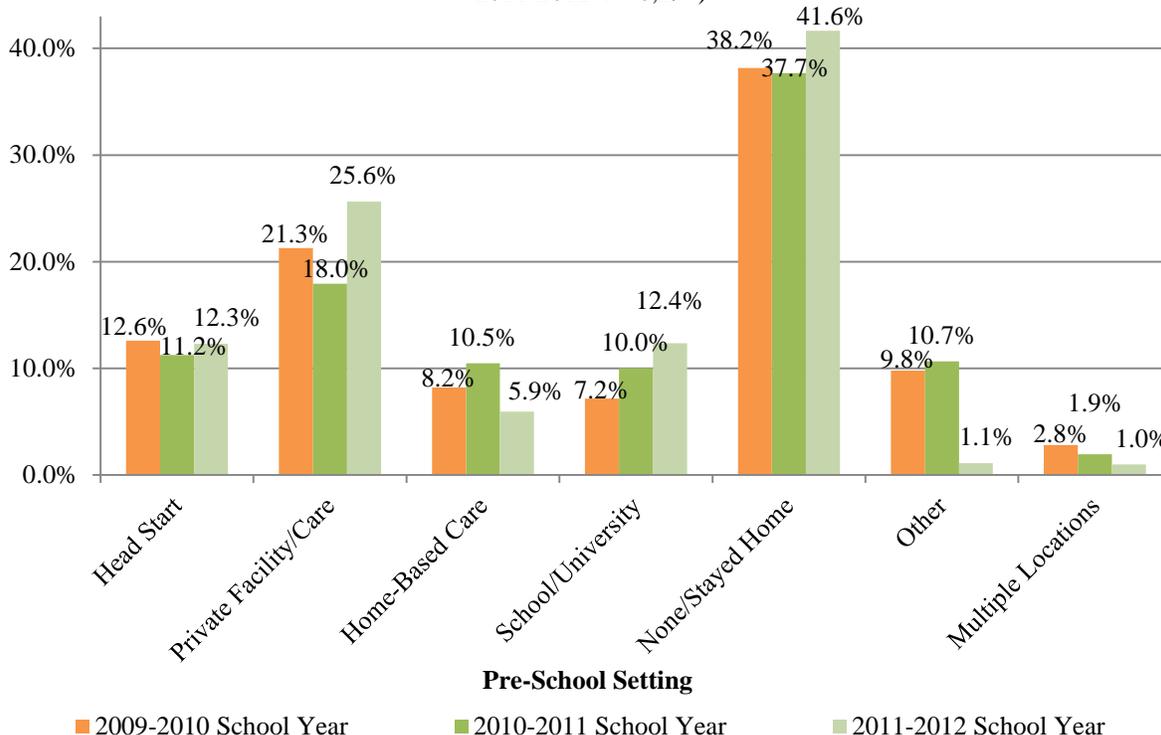
## Pre-school Setting

The survey also asked about the type of pre-school setting, if any, respondents' kindergartners had attended in the twelve months prior to kindergarten (see Figure 2.3). Compared to 2010-2011 data:

- 41.6 percent of respondents indicated that their kindergartner had stayed at home in the prior year, not attending pre-school, which is a 3.9 percentage-point increase.
- There has been a sharp decrease (4.6 percentage points) in reported attendance in Home-Based Care from 10.5% in 2010-2011 to 5.9% in 2011-2012.
- There has been a slight increase in all other categories, possibly due to the reduced number of respondents indicating "other" care or "multiple locations."

**Figure 2.3: Child's Type of Pre-School Setting During Past Twelve Months**

(2008-2009 Not Available; 2009-2010  $n = 9,258$ ; 2010-2011  $n = 10,217$ ; 2011-2012  $n = 8,294$ )



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## INSURANCE STATUS

### *Background*

Nevada has consistently placed near the bottom of nationwide rankings with regard to the number of children covered by health insurance. According to the U.S. Census Bureau American Community Survey (2010), approximately 8.0 percent of children under the age of 18 in the United States are uninsured compared to 17.4 percent of children under the age of 18 in Nevada.

A correlation exists between children's health insurance status and access to health care services. Research indicates that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes when compared to insured children. For example, uninsured children were nearly ten times as likely as insured children to have an unmet health need (Robert Wood Johnson Foundation, 2005). In addition, Nevada was ranked last when compared nationally across four dimensions: healthcare access and affordability, prevention and treatment, potential to lead healthy lives, and performance of overall health systems (Securing a Healthy Future, 2011).

### *Status of Health Insurance of Kindergarten Students*

In the current study, respondents were asked to indicate their child's current health insurance coverage. Approximately 87.7 percent of parents surveyed indicated that their child had some type of health insurance and **12.3 percent of respondents stated their child had no coverage.** Since 2008-2009, the percentage of children with health insurance has increased by 6.8 percentage points. This indicates that **more children are insured now as compared to the last three years.**

### **Of the health insurance options:**

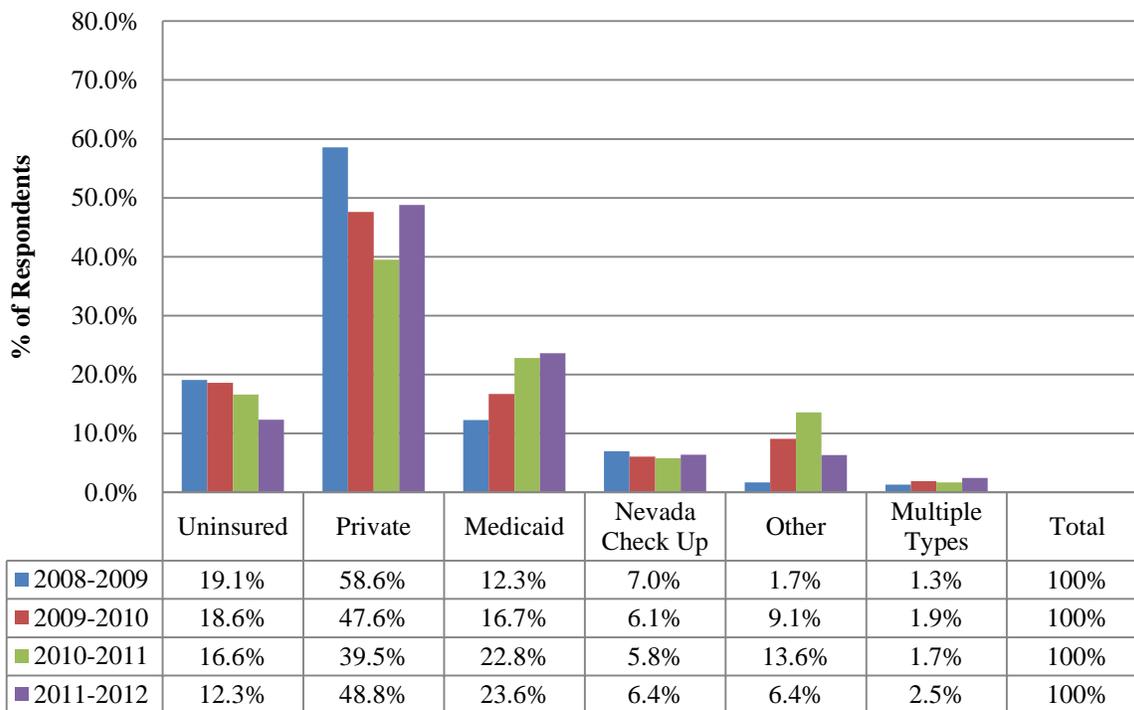
- Approximately half (48.8%) of the respondents indicated that their children had private health insurance.
- Thirty percent of children had public health insurance (either Medicaid or the state's public health insurance program, Nevada Check Up).

Although the statistics found in this study are similar to national trends in children's health insurance coverage (Kaiser Family Foundation in 2009), these percentages continue to fluctuate from previous years of the Kindergarten Health Survey. However, there is a steady trend that appears to indicate that the number of children insured is increasing. It is important to note that the **rates of children enrolled in private insurance are decreasing while enrollment in public insurance is increasing.**

# INSURANCE STATUS

**Figure 3.1: Survey Responses Concerning Types of Health Insurance Covering Children by School Year**

(2008-2009  $n = 10,626$ ; 2009-2010  $n = 9,110$ ; 2010-2011  $n = 10,183$ ; 2011-2012  $n = 8,462$ )



Approximately 6.4 percent of respondents indicated that their child had some “other” type of health insurance not listed on the survey questionnaire. These “other” types of insurance ranged from coverage provided through the military, a Native American reservation, or were unclear responses that were difficult to recode into one of the survey categories. It is possible that some of these “other” types of insurance could have been coded as belonging to the private or public survey categories.

In addition, 2.5 percent of respondents selected multiple types of health insurance for their children, which were categorized as “multiple” in Figure 3.1. The majority of these respondents specified that their child had both Medicaid and a private form of health insurance, or Medicaid and Nevada Check Up.

# INSURANCE STATUS

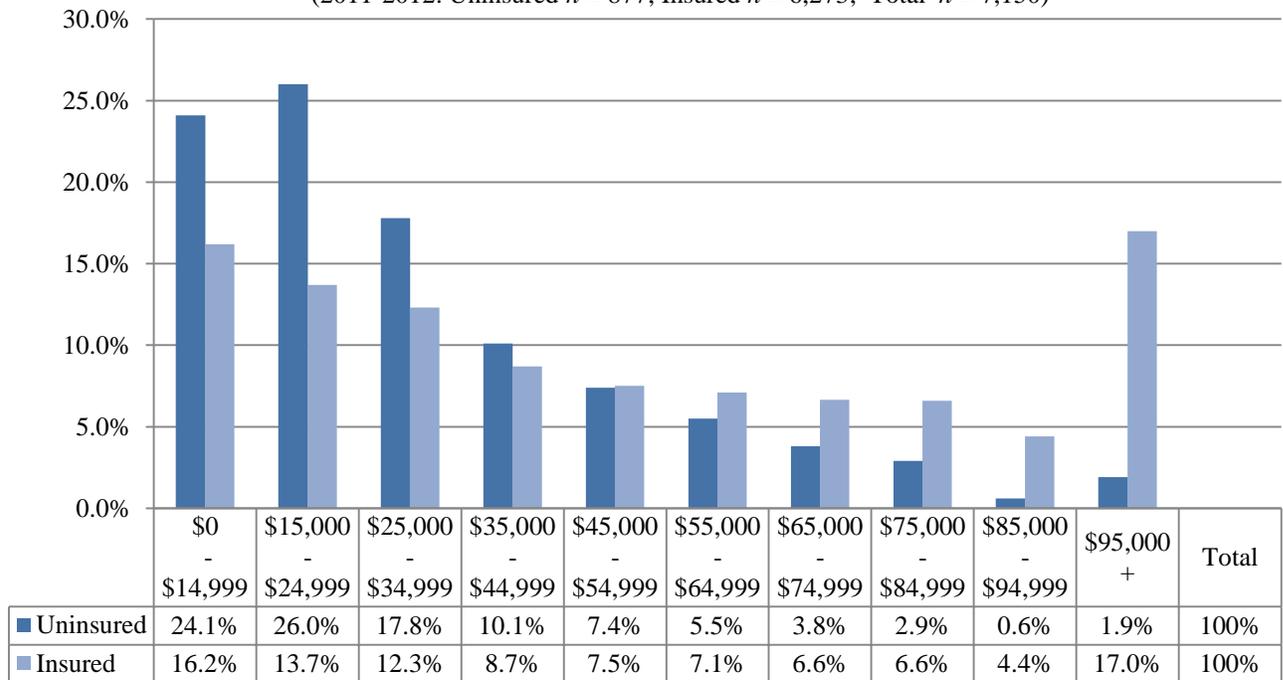
## *Annual Household Income and Insurance Status*

Not surprisingly, **children from families with a lower household income are more likely to be uninsured**, than those children whose family has a higher income (see Figure 3.2).

- 19.0 percent of children living in households with an annual income of less than \$25,000 have no health insurance. This is a drastic decrease from previous years.
- Only 11.6 percent of children who live in a household with an annual income of less than \$25,000 have private insurance, while over half (51.2%) receive Medicaid and 11.2 percent receive Nevada Check-Up.
  - Compared to previous years of the study, the number of children with private insurance and Nevada Check-Up has decreased, while the number of children enrolled in Medicaid has grossly increased from 30.8% in 2008-2009 to 51.2% in 2011-1012.
- The Kaiser Family Foundation study (2009) found that of those lower- and middle-income families that had access to private health insurance coverage, only 19 percent could afford the premiums.

**Figure 3.2: Annual Household Income by Child's Insurance Status**

(2011-2012: Uninsured  $n = 877$ ; Insured  $n = 6,273$ ; Total  $n = 7,150$ )



### Household Income

Note. These findings are significant at  $p < .001$ . Percentages are calculated out of the number within each insurance category.

# INSURANCE STATUS

## *Race/Ethnicity and Insurance Status*

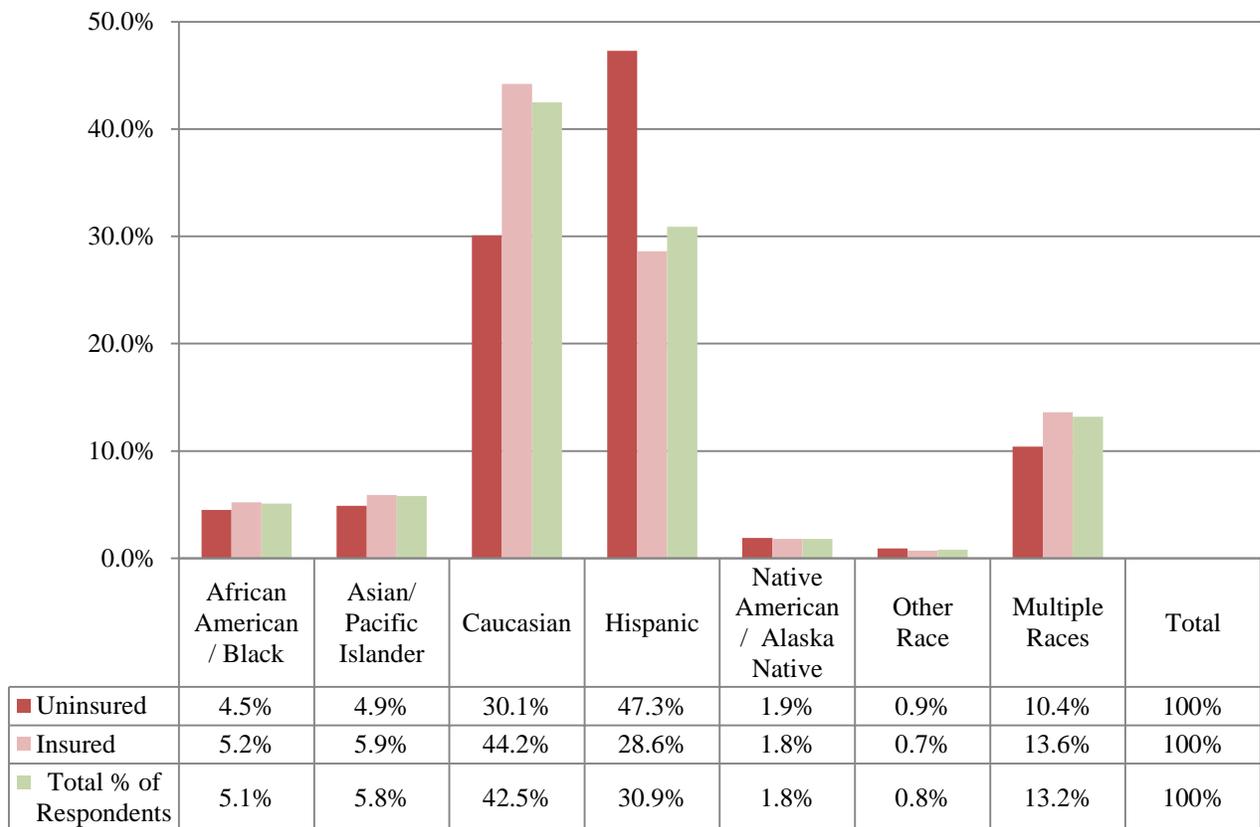
Figure 3.3, detailing the relationship between race/ethnicity and insurance status, shows that nearly half of children who are uninsured are Hispanic (47.3 percent), followed by Caucasian children (30.1 percent).

Compared to baseline data in the 2008-2009 school year:

- The percentage of uninsured Caucasian children has increased by 7.3 percentage points;
- The percentage of uninsured Hispanic children has decreased by about 11.3 percentage points; however, Hispanic children are still more likely to be uninsured compared to other racial/ethnic groups.

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

(2011-2012:Uninsured  $n = 1,032$ ; Insured  $n = 7,330$ ; Total  $n = 8,362$ )



### **Race/Ethnicity**

Note. These findings are significant at  $p < .001$ . Percentages are calculated out of the number within each insurance category.

Research indicates that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Newport & Mendes, 2009); approximately 32.4 percent of Hispanics across the country are uninsured (DeNavas-Walt, Proctor, & Smith, 2010) and this rate is likely to increase in states with large proportions of

## INSURANCE STATUS

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Hispanic immigrants like Nevada. Although many of these children are eligible for public health insurance, barriers to enrollment such as language and past negative experiences, continue to impede parents/guardians from obtaining insurance coverage for their children (Perry, Kannel, & Castillo, 2000).

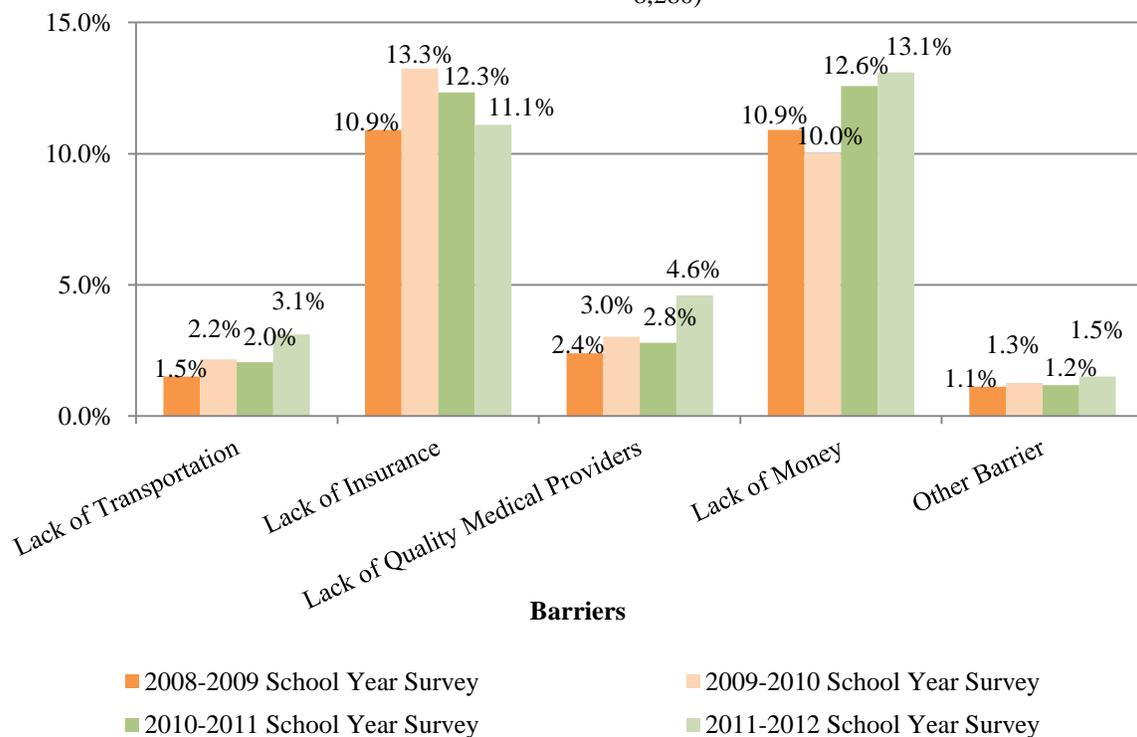
## HEALTHCARE AND COMPLIANCE

### *Barriers to Accessing Healthcare*

When asked about accessing health care for their child, of the **22.8 percent of participating parents that had experienced at least one barrier**, the majority had difficulty due to either a “lack of insurance” or “lack of money” for health care services.

**Figure 4.1: Types of Barriers When Accessing Health Care for Child**

(2008-2009  $n = 10,382$ ; 2009-2010  $n = 9,275$ ; 2010-2011  $n = 10,271$ ; 2011-2012  $n = 8,280$ )



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

- **63.4% reported having health insurance** (26.6% private, 23.8% Medicaid, and 13.0% Other).
- 64.4 percent of respondents reporting a barrier had an annual household income of less than \$35,000.

Most parents/guardians of uninsured children cannot afford to pay the high out-of-pocket costs charged for medical services. A recent report examining uninsured families found that financial barriers were less likely to be an issue for lower-income families with insured children compared to families whose children were uninsured (Kaiser Family Foundation 2009). However, even if children are covered by health insurance, other financial barriers such as high co-pays or

## HEALTHCARE AND COMPLIANCE

premiums are likely to impede children’s access to health care. A combination of these financial barriers may result in many parents foregoing necessary medical care for their children. Other common barriers reported included wait times for appointments and requirements for care (e.g. paperwork) that the parent/guardian did not feel they were able to follow.

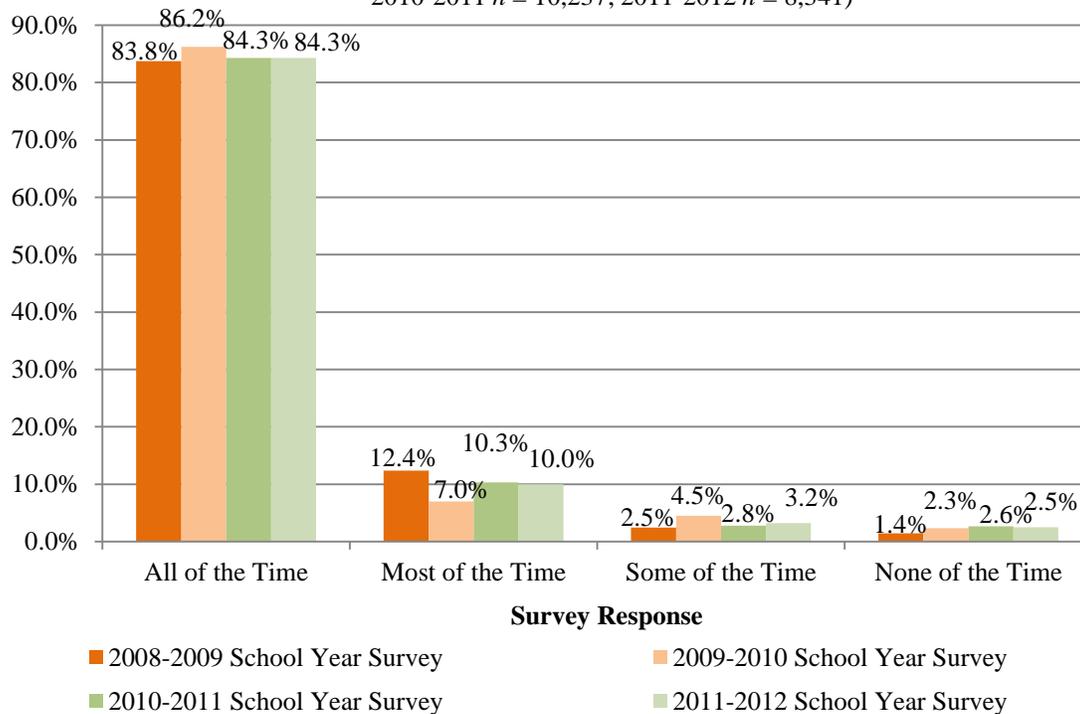
### *Healthcare Compliance*

Parents were also asked if they were generally able to follow the recommendations provided by their child’s doctor.

- The majority (84.3 percent) of respondents indicated that they were able to follow doctor’s recommendations for their child(ren) “all of the time”.
- Compared to the prior year, the percentage of respondents that reported they were able to follow doctor’s recommendations “all of the time” remained consistent.
- Only 2.5 percent of respondents reported that they were never able to follow their child’s doctor’s recommendations.
- Even though the percentage of those that reported never being able to follow recommendations in 2011-2012 (2.5 percent) was almost identical to the 2009-2010 and 2010-2011 data (2.3 and 2.6 percent, respectively), compared to the 2008-2009 data, the percentage of respondents that reported never following recommendations almost doubled (1.4 percent vs. 2.5 percent).

**Figure 4.2: Ability to Follow Doctor's Recommendations for Child's Care**

(2008-2009 *n* = 10,674; 2009-2010 *n* = 9,263; 2010-2011 *n* = 10,237; 2011-2012 *n* = 8,341)



## HEALTHCARE AND COMPLIANCE

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If parents indicated anything other than “all of the time” in response to this question, they were asked to list any reasons for their inability to comply with the doctor’s recommendations.

The most frequently listed reasons included:

- financial barriers, such as not being able to afford the prescribed care plans because of lack of insurance or inadequate income,
- various accessibility issues, including inconvenient scheduling of appointments and/or treatments, or a lack of adequate transportation,
- and a lack of trust in medical providers, forgetting to administer medications, or the belief that the child no longer needed the care plan because he or she was feeling better.

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## ROUTINE CARE

### *Background*

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 child well visits. Children without health insurance are more likely to miss out on routine care than insured children. Hoilette, Clark, Gebremariam, and Davis (2009) found that 23.3% of uninsured children in the United States reported that they did not have a regular source of care.

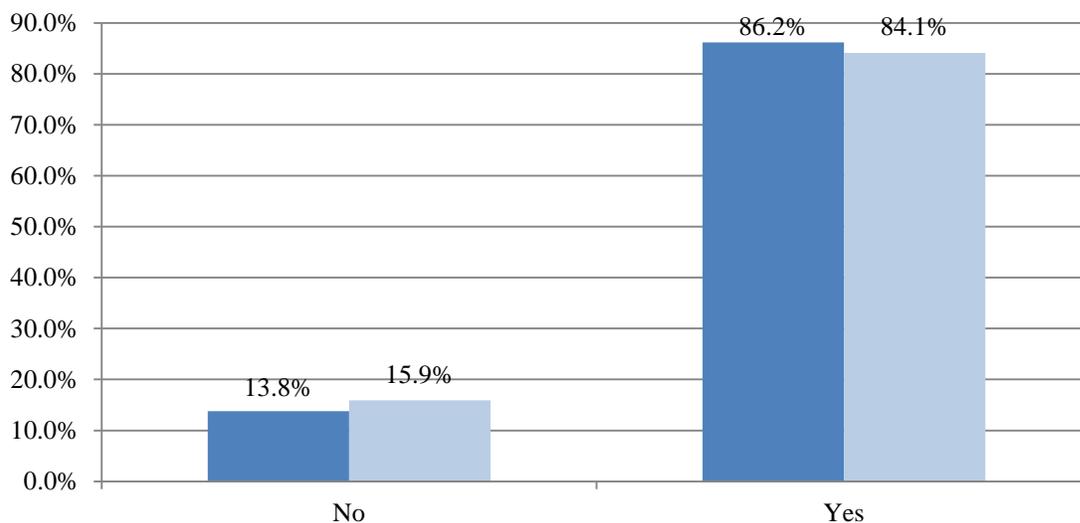
Having access to regular primary care services, or a medical home, is another key indicator of children's overall health status. Children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Shi, et al., 1999). Primary care providers, (e.g. physicians, physician's assistants, nurses) offer a medical home where children can get basic care services, such as annual check-ups and immunizations. Children that have access to a regular primary care provider who coordinates and organizes their care tend to have a better health status than children without access to a primary care provider (Starfield, Shi & Macinko, 2005).

### *Routine Care for Kindergarten Students*

Current survey results indicate that 86.2 percent of kindergartners had at least one routine check-up in the twelve months prior to the date of the survey. Similarly, 84.1 percent of parents reported that their child had a primary care provider. **Both of these percentages have steadily increased since the 2008-2009 survey** (82.9 percent, 79 percent).

**Figure 5.1: Child's Routine Check-Ups and Presence of Primary Care Provider**

(2011-2012: Check-Up  $n = 8,460$ ; Primary Care Provider  $n = 8,423$ )



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

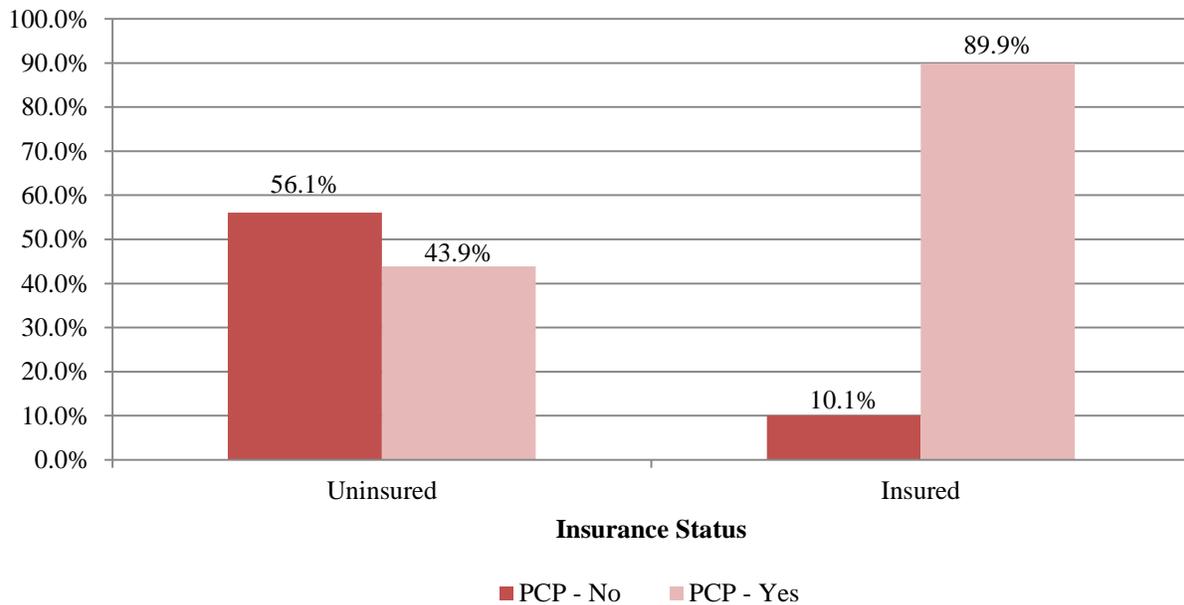
## ROUTINE CARE

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In the current sample, approximately 89.9 percent of children with health insurance also have a primary care provider, while only 43.9 percent of children without insurance have a primary care provider. **These results clearly indicate that a child's insurance status is related to having a primary care provider** (see Figure 5.2).

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

(2011-2012: Uninsured  $n = 1,033$ ; Insured  $n = 7,339$ ; Total  $n = 8,372$ )



\*These findings are statistically significant at  $p < .001$ .

\*\*Percentages are calculated out of the number within each insurance category.

## ROUTINE CARE

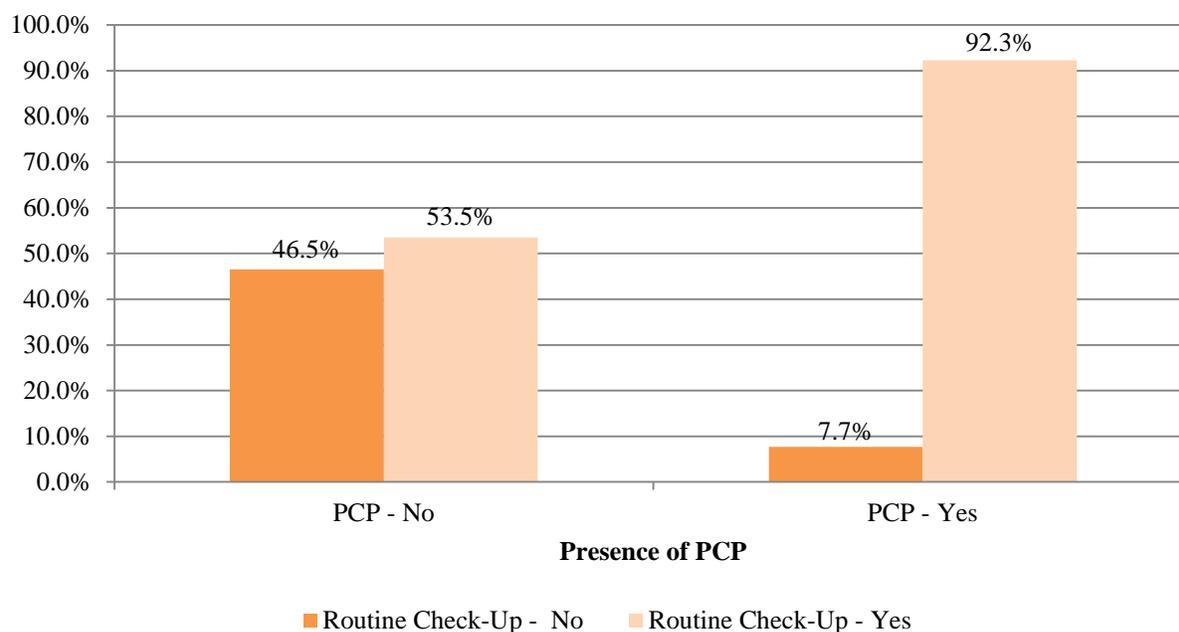
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Having a primary care provider also influences whether or not a child has had a routine check-up in the past 12 months (see Figure 5.3).

- Of the children that had a primary care provider, 92.3 percent had a routine check-up in the last year.
- Of the children without a primary care provider, nearly half (46.5 percent) had not had a routine check-up in the last year.
- These percentages are similar to those found in 2008-2009, 2009-2010, and 2010-2011 data.

**Figure 5.3: Child's Routine Check-Ups by Presence of Primary Care Provider (PCP)**

(2011-2012: No PCP  $n = 1,316$ ; Has PCP  $n = 7,058$ ; Total  $n = 8,374$ )



\*These findings are statistically significant at  $p < .001$ .

\*\*Percentages are calculated out of the number within each PCP category.

## CARE FOR ILLNESS OR INJURY

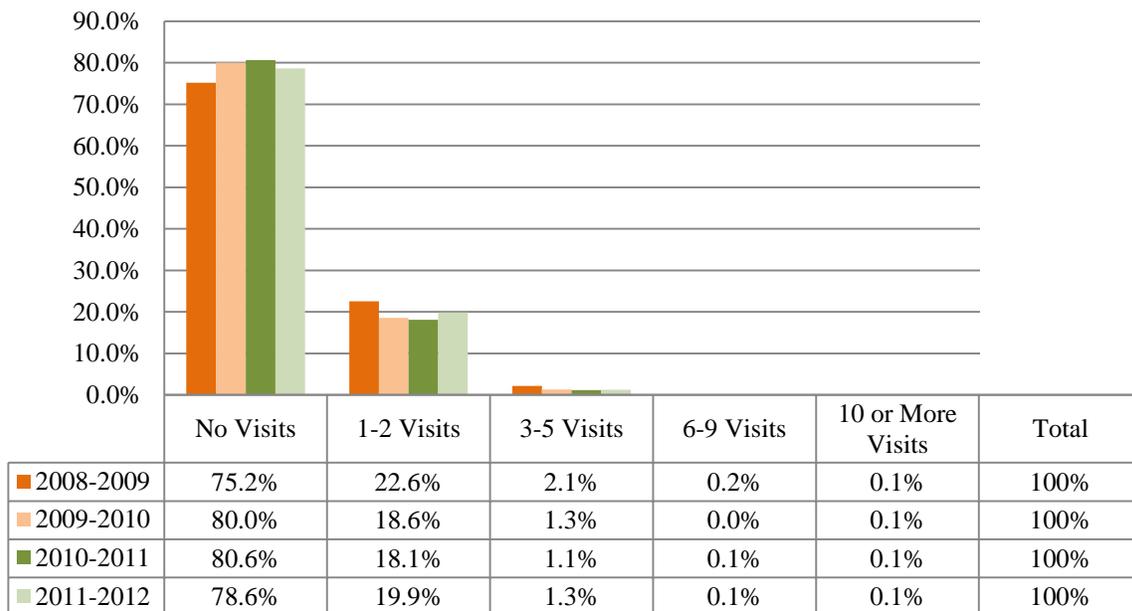
In recent years, a growing number of uninsured children with minor, non-life-threatening conditions have accessed health care services in emergency care facilities (Garci, Bernstein, & Bush, 2010). This upward trend is likely related to an expanding uninsured population and higher costs for health care. Most uninsured children come from lower-income families that cannot afford to pay the high costs for medical care (Garcia et al., 2010). These families are often left with little option but to use hospital emergency rooms (ERs) or other urgent care facilities for non-life-threatening conditions because that is the only place that can get the care they need.

Parents were asked about the frequency in the past twelve months of ER visits for non-emergency care for their child.

- Approximately 19.9 percent of respondents indicated they had visited an ER for a non-life threatening illness or injury once or twice in the past year, which was fairly consistent with data from previous years (see Figure 6.1).

**Figure 6.1: Number of Emergency Room Visits for Non-Life-Threatening Care**

(2008-2009 n = 10,970 ; 2009-2010 n = 10,970; 2010-2011 n = 10,380; 2011-2012 n = 8,443)

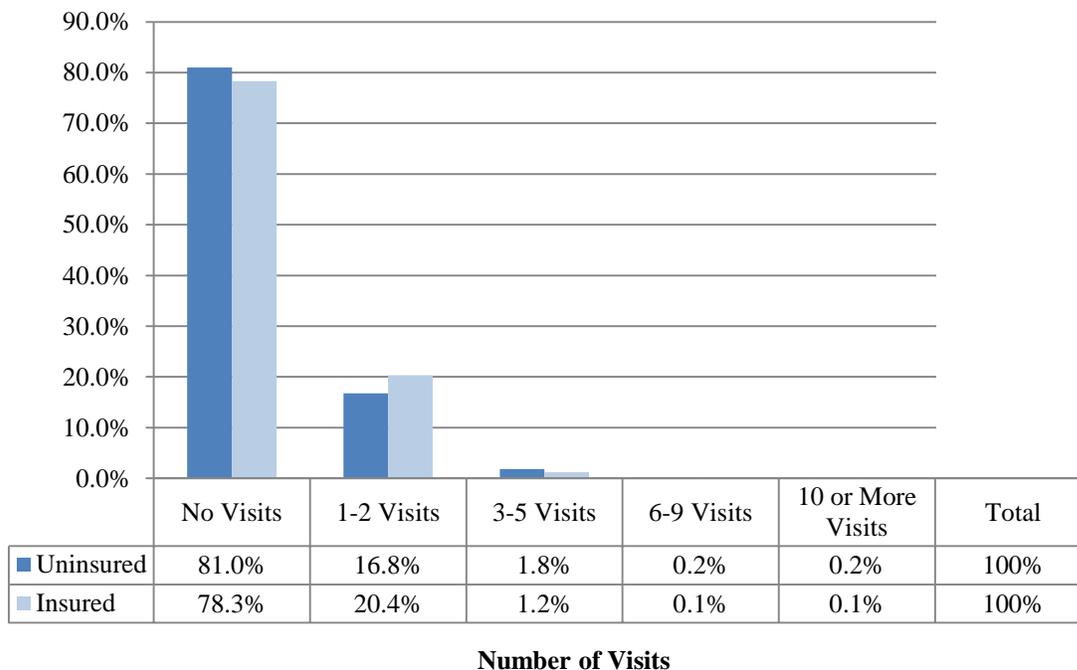


## CARE FOR ILLNESS OR INJURY

**Insurance status does not appear to be an indicator of usage of an ER.** Figure 6.2 shows the percentage of ER visits by children's insurance status. For both insured and uninsured groups, the vast majority of children had not been to an ER for a non-emergency in the past 12 months.

**Figure 6.2: Percentage of Emergency Room Visits for Non-Life-Threatening Care by Child's Insurance Status**

(2011-2012: Uninsured  $n = 1,032$ ; Insured  $n = 7,355$ ; Total  $n = 8,387$ )



## MEDICAL CONDITIONS

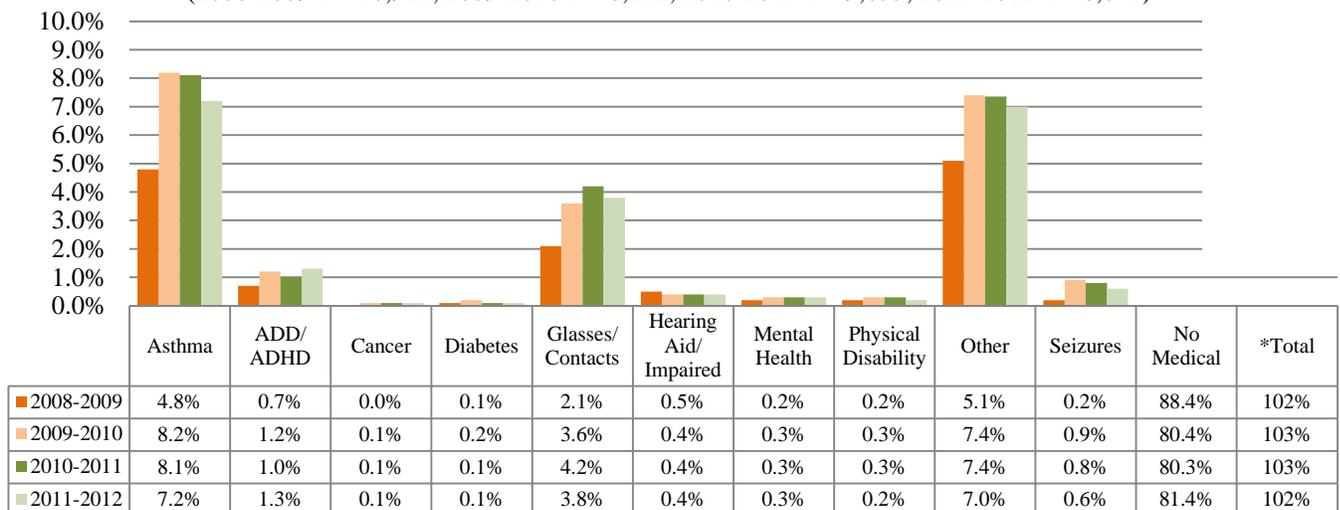
Many of Nevada’s children have special medical conditions. Treatment for these children is often expensive and requires a team of medical care providers, led by a primary care physician, devoted to the treatment and maintenance of their conditions. Thus, health insurance coverage is vital for children with special health conditions, as it ensures that these children have access to ongoing care and treatment. Generally, health insurance serves as a safeguard for parents and families against the higher costs necessary for the treatment and maintenance of special medical conditions.

According to this year’s survey results, **18.6 percent of parents indicated that their child had a medical condition requiring special treatment** (see Figure 7.1). More specifically:

- 7.2 percent of respondents reported that their child had asthma.
  - Halterman et al. (2008) found that asthmatic children without insurance were more likely than insured children to be at risk for severe complications and unnecessary hospitalizations. In addition he found that 13 percent of children with asthma (759,000 nationwide) were uninsured at some time during the year. More recently Diedhiou, Probst, Harding, Martin, and Xirasagar (2010), found that approximately 9% of 14,916 children with special health care needs that live in the United States and have asthma lacked consistent health care coverage; children aged 0 to 5 years of age represented 23.7% of that sample.
- The percentage of children wearing glasses or contact lenses (3.8 percent) has increased by nearly 2 percentage points since the first survey conducted three years ago.
- Approximately 7.0 percent of respondents indicated that their child had an “other” health condition not listed on the survey. Such “other” conditions included allergies, skin ailments such as eczema, rare diseases or disorders, speech problems, and autism.

**Figure 7.1: Types of Medical Conditions in Children**

(2008-2009 *n* = 10,977; 2009-2010 *n* = 8,222; 2010-2011 *n* = 9,633; 2011-2012 *n* = 8,041)



\*Respondents can select multiple categories therefore the Total percent may exceed 100%.

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## DENTAL CARE

### *Background*

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. These children also miss more days of school than children without dental problems (Gift, Reisine, Larach, 1992).

Research also indicates that uninsured children are much more likely to have unmet dental needs (e.g. teeth cleanings). One study found that 2 percent of insured children had an unmet dental need whereas 8 percent of uninsured children had an unmet dental need (Child Trends, 2004). Additionally, uninsured children are 1.5 times more likely to not have received preventative care in the last year and 3 times more likely to have an unmet dental need than insured children (Liu et al., 2007). More specifically, Edlestien and Chinn (2009) found that, nationally, 58% of children with private coverage had a dental visit in 2004 compared to 34% of children with Medicaid and the State Children's Health Insurance Program (SCHIP), and only 28% of children without dental coverage.

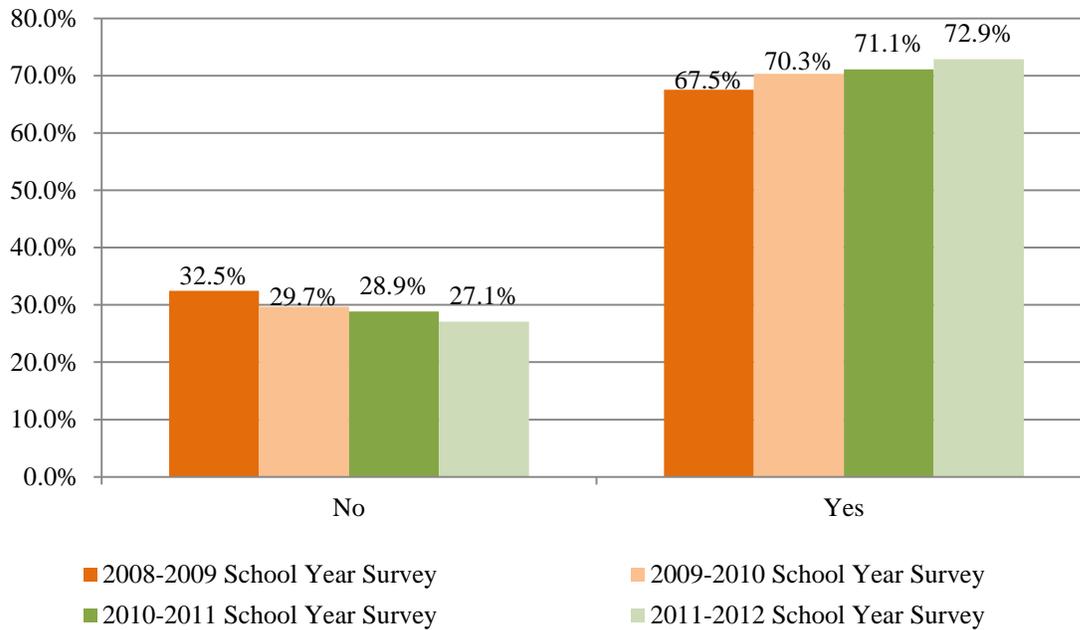
### *Dental Care of Children Entering Kindergarten*

To prevent oral health problems, it is generally recommended that children receive regular dental check-ups every six months to a year. In the current study, 27.1 percent of survey respondents indicated that their kindergartner had NOT seen a dentist in the past twelve months, which was nearly 2 percentage points lower than the 2010-2011 data, and a decrease of over 5 percentage points from the 2008-2009 data (Figure 8.1). **This indicates that the percent of children visiting a dentist is slowly increasing.** Approximately 44 percent of kindergartners in this sample already had a cavity sometime in their life which is consistent with the data from previous years (Figure 8.2).

# DENTAL CARE

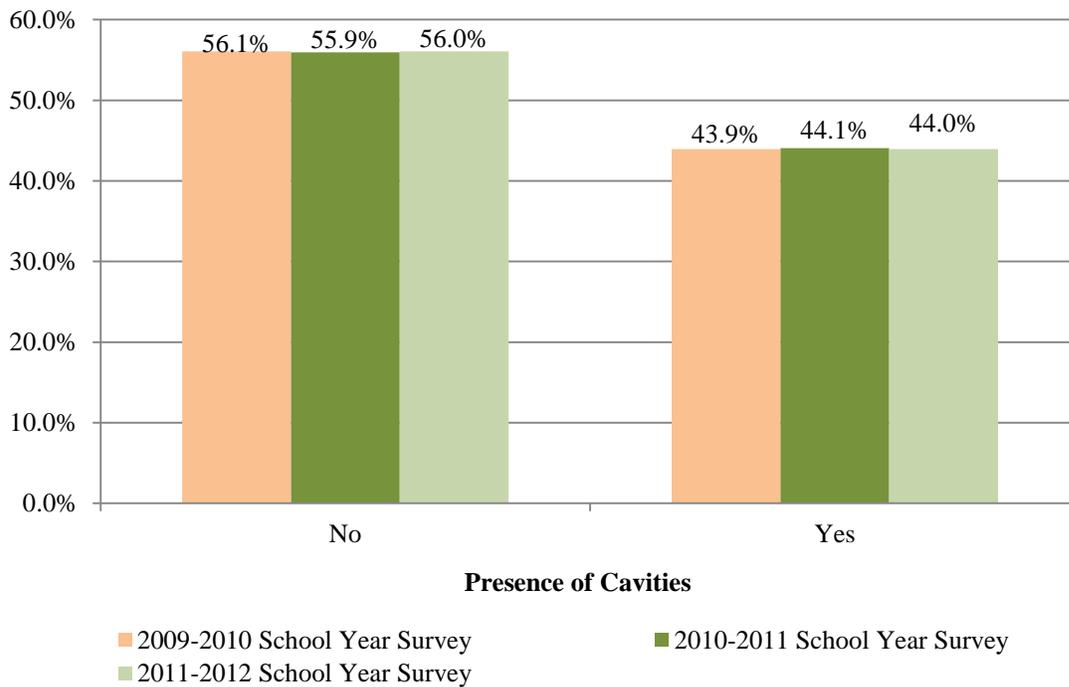
**Figure 8.1: Child's Dental Visit**

(2008-2009 n = 11,007; 2009-2010 n = 9,449; 2010-2011 n = 10,412; 2011-2012 n = 8,461)



**Figure 8.2: Presence of Cavities**

(2008-2009 Not Available; 2009-2010 n = 9,238; 2010-2011 n = 10,222; 2011-2012 n = 8,211)



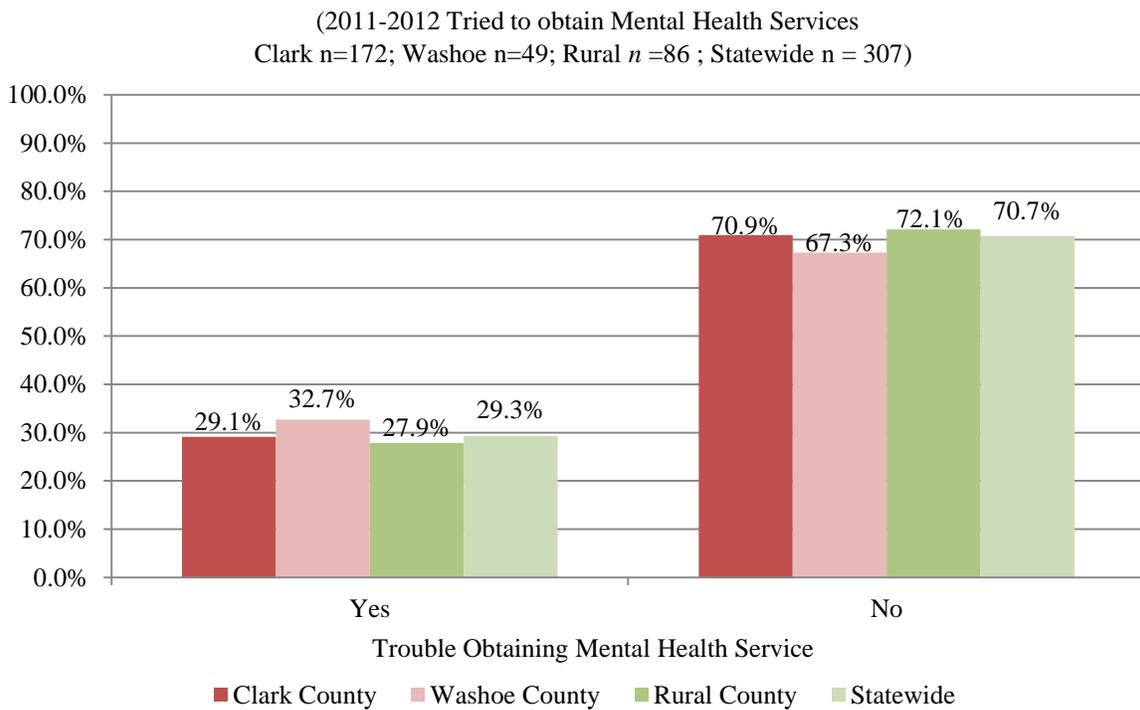
## MENTAL HEALTH

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. 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 (Child Trends, 2004).

The survey results indicated that **4.2 percent of respondents have tried to access mental health services for their children**, a percentage similar to the 2008-2009, 2009-2010, and 2010-2011 data. Of the respondents who have tried to access these services for their child:

- 92.7% of those who tried to access mental health services had insurance. It is possible that being uninsured might be a barrier in attempting to access mental health services.
- **Of those that attempted to access services, 29.3 percent reported having trouble obtaining the services.**
  - When examining this percent across counties, it was found that, unlike the 2010-2011 data, there was little difference between counties (see Figure 9.1).
  - When examining this percent by year, percentages are similar to the 2008-2009, 2009-2010, and 2010-2011 data.
  - Causes for problems obtaining services ranged from a lack of providers, lack of insurance, lack of available funds, and in some cases one parent did not consent to treatment.

**Figure 9.1: Trouble Obtaining Mental Health Services by County**



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## WEIGHT AND HEALTHY BEHAVIORS

Childhood obesity is a growing public health problem across the country (CDC, 2009c). Epidemiologists have identified an increase in the number of children with Type II diabetes in recent years (Narayan, Boyle, Thompson, Sorensen, & Williamson, 2003). Therefore, monitoring children's weight has become an important tool for analyzing potential health problems.

The current survey asked parents to write in their child's height and weight information. NICRP used this 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:

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

Many of the respondents left one or both of the height and weight questions blank, resulting in only 3,959 cases (46.4 percent of the entire sample) with information available to calculate a BMI value. 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 kindergartners would be outside of this age range. Age is an important determinant as it is used to determine weight status category and is strongly correlated with height, another variable in which restrictions were placed. If the child's height was outside of the 95% interval of average height of 4-6 year olds (based on the CDC, 2000), the child was also excluded from the analysis. Therefore the number of cases with a valid BMI value was 3,596 (42.1 percent of the entire sample).

Once BMI was calculated, it was assigned a weight status category based on CDC standards, which use a child's age, gender, and BMI percentile to determine the child's weight status. Table 10.1, below, outlines the BMI percentile ranges for each weight status category.

**Table 10.1: Weight Status Categories by BMI Percentile Ranges**

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

Source: CDC About BMI for Children and Teens.

[http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html#What is BMI percentile](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html#What%20is%20BMI%20percentile)

For the purpose of this study, NICRP used 10 different weight status formulas: one formula for girls and boys in each of the following ages: 4.0, 4.5, 5.0, 5.5, and 6.0. Table 10.2 outlines the calculations used to determine weight status categories.

## WEIGHT AND HEALTHY BEHAVIORS

**Table 10.2: Weight Status Category Calculations Based on BMI Values**

Females				
Age	Weight Status Category			
	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				
Age	Weight Status Category			
	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: CDC Body Mass for Age Tables. [http://www.cdc.gov/growthcharts/html\\_charts/bmiagerev.htm](http://www.cdc.gov/growthcharts/html_charts/bmiagerev.htm)

When comparing the 2011-2012 school year data for BMI to previous years, it was necessary to re-analyze prior year's BMI data with the same validity criteria which was established in the 2010-2011 report. Thus, some of the data for the first two years of this study, with regards to BMI, have been adjusted. However the trends have remained the same.

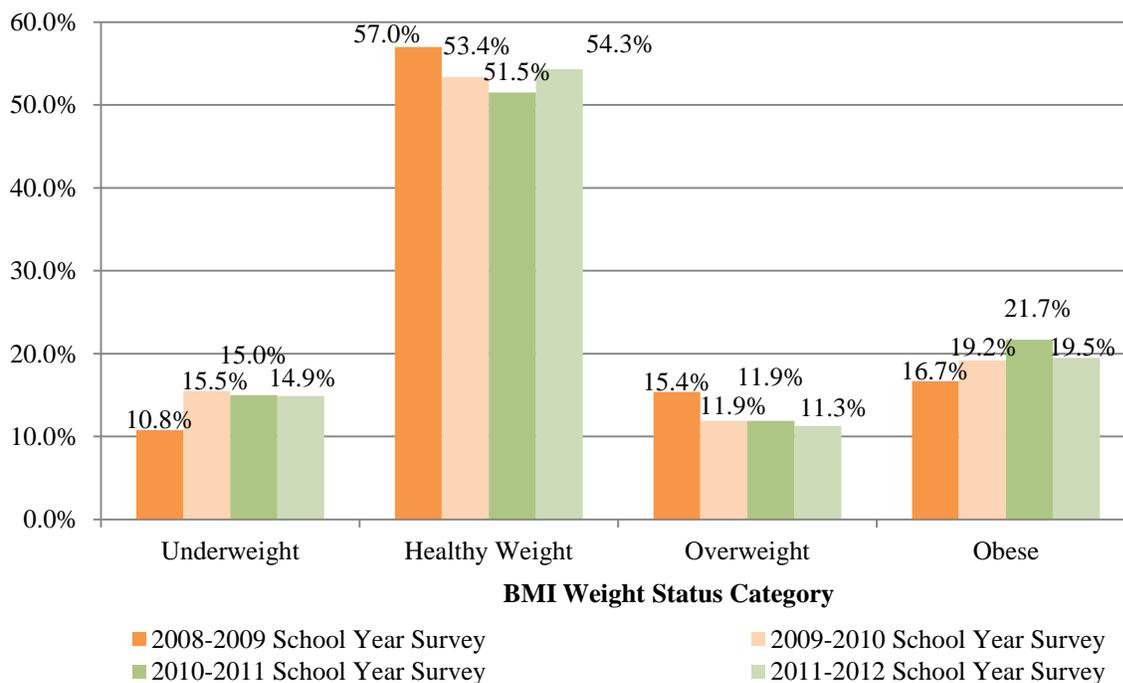
## WEIGHT AND HEALTHY BEHAVIORS

Over half (54.3 percent) of children entering kindergarten whose parents participated in this survey were calculated to be at a healthy weight, a rate which has increased by 4 percentage points compared to the previous school year (see Figure 10.1). However,

- **14.9% of children were underweight;** Washoe County (15.4%) and Clark County (15.3%) had slightly higher percentages of underweight children compared to the rural counties (13.6%)
- **11.3% of children were overweight, and approximately one fifth (19.5%) of the children were considered obese given the reported data.** Rural counties had the highest percentage of overweight children (12.9 percent) followed by Clark (11.3percent), then Washoe with the lowest percent (8.6 percent). The percent of obese children are consistent across all counties.

**Figure 10.1: Child's Weight Status Category**

(2008-2009  $n = 3,262$ ; 2009-2010  $n = 3,659$ ; 2010-2011  $n = 4,198$ ; 2011-2012  $n = 3,596$ )



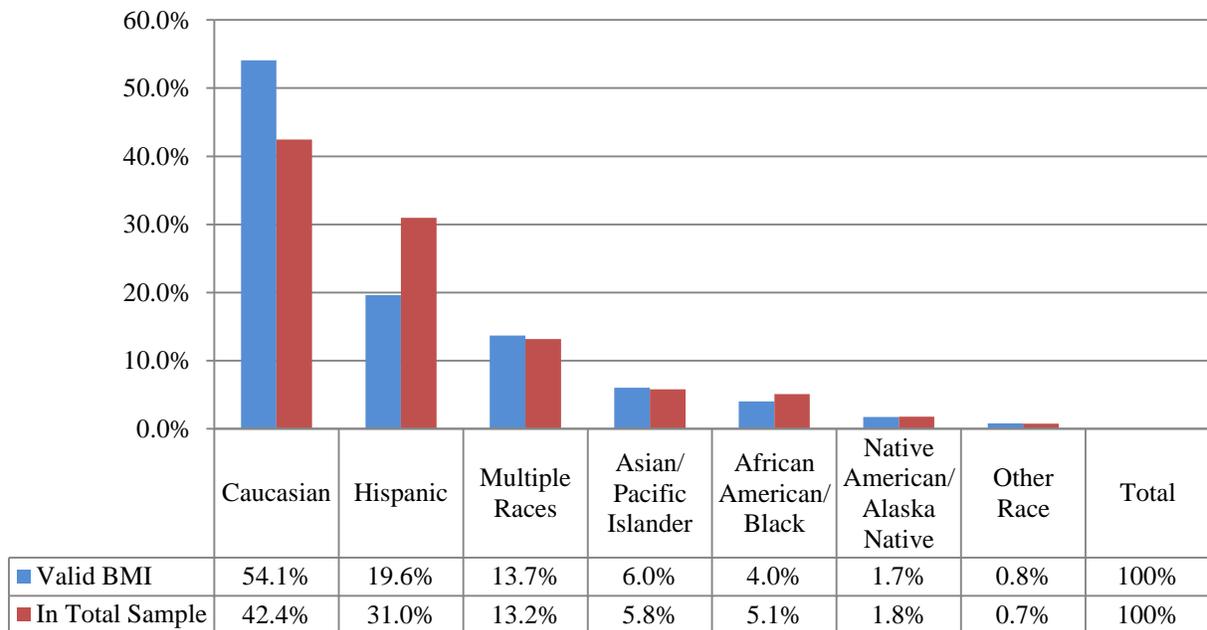
## WEIGHT AND HEALTHY BEHAVIORS

When comparing each child’s race/ethnicity with his or her BMI, we can see some differences in distributions across weight status categories for each race/ethnicity group. It is important to note that the total number of respondents included in this analysis is even fewer than those in the above statistics on valid BMI’s 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/ethnicity demographics of the survey sample as a whole, with the greatest discrepancy being the percent of Hispanic children with valid BMI data. Even though individuals who self-reported as Hispanic make up 31% of the total sample, only 19.6% of the sample with a valid BMI are Hispanic. Figure 10.2 illustrates the race/ethnicity data for children with a valid BMI.

**Figure 10.2: Race/Ethnicity of Participants with a Valid Body Mass Index**

(2011-2012: Valid BMI  $n = 3,561$ ; Total  $n = 8,422$ )



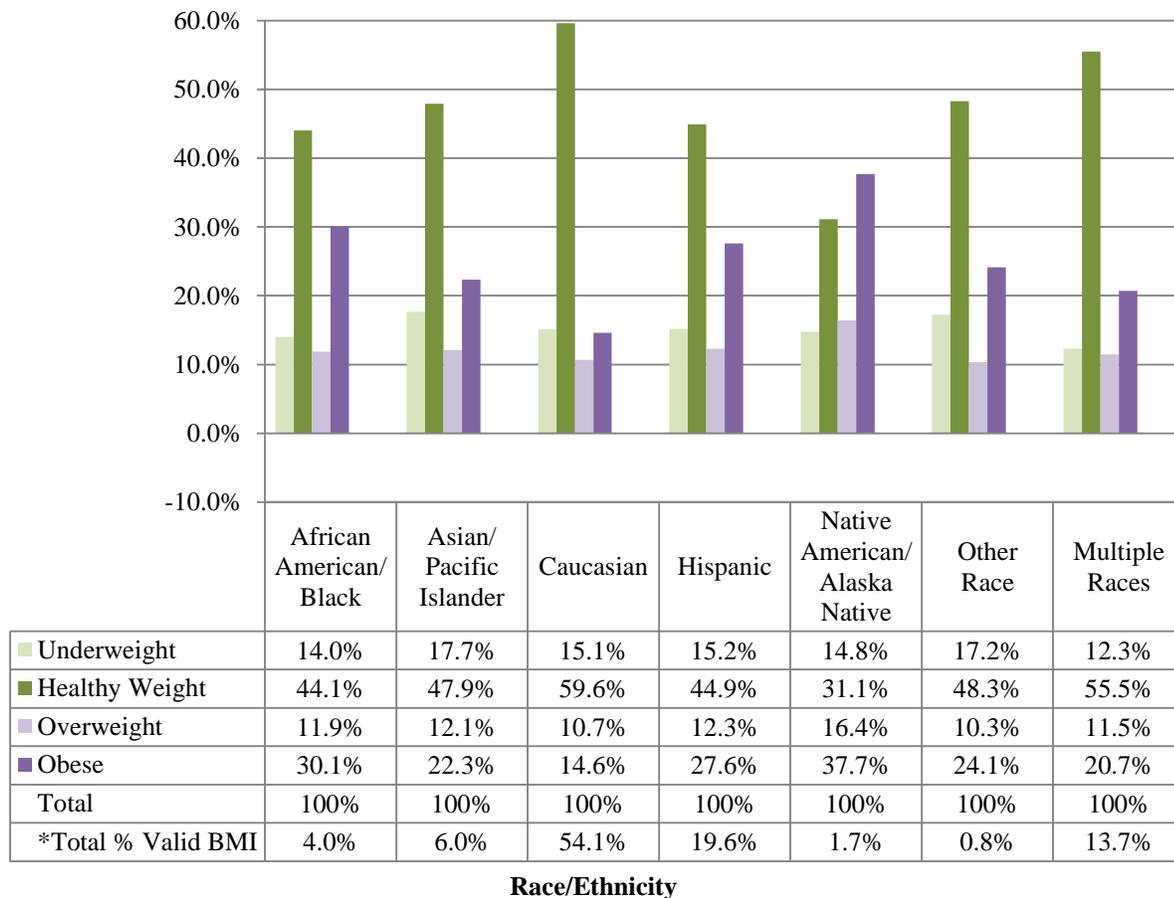
## WEIGHT AND HEALTHY BEHAVIORS

An examination of the differences in BMI across racial/ethnic groups in Figure 10.3 indicates that:

- More Native American/Alaska Native children fell into the obese category (37.7 percent) than the other races/ethnicities; however, this is based on a very small sample of Native American/Alaska Native children.
- For Caucasian, Hispanic, and Asian/Pacific Islander children, there were slightly more children at a healthy weight than were overweight/obese.

**Figure 10.3: Child's Weight Status Category by Child's Race/Ethnicity**

(2011-2012  $n = 3,561$ )



Note. These findings are significant at  $p < .001$ . \* indicates percentages are calculated out of the total number of Valid BMI responses in each race/ethnicity category.

## WEIGHT AND HEALTHY BEHAVIORS

Explanations for obesity in this population include a number of factors including behavior regiments such as 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 have been found to be related to higher BMI's (Delva, Johnston, O'Malley, 2007; Kumanyika, 2008). Therefore, the following questions were included on the Kindergarten Health Survey in order to determine these behaviors as children enter kindergarten.

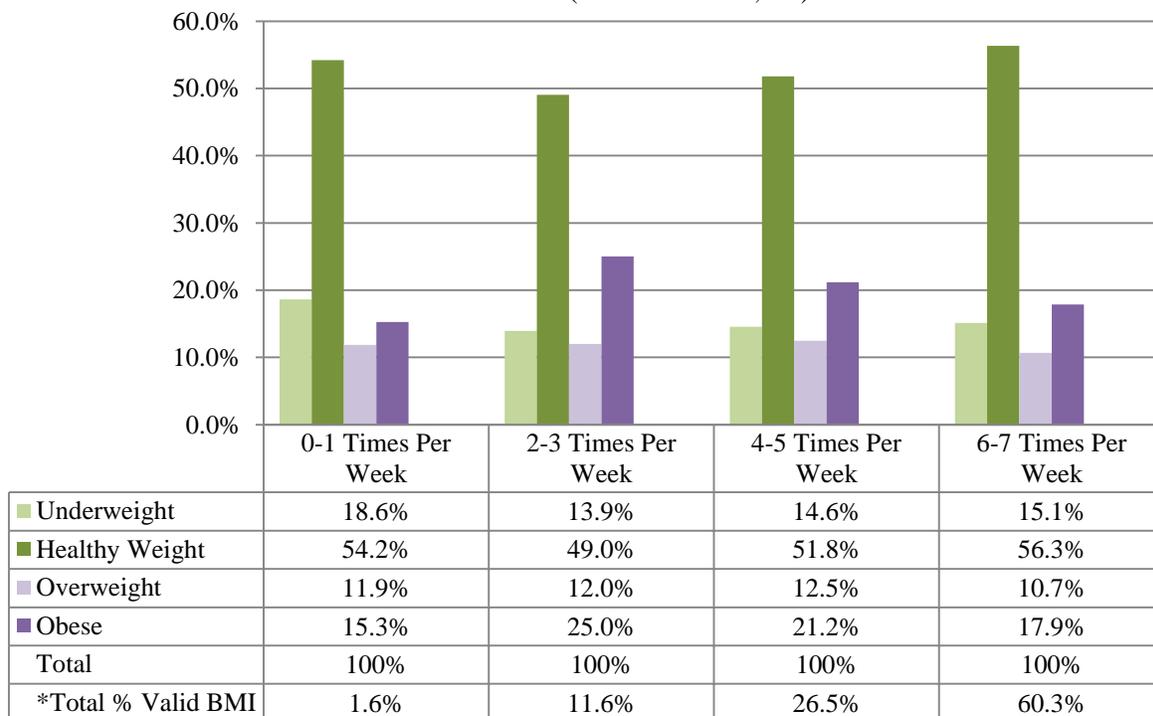
### *Physical Activity*

Parents/guardians were asked to report the number of times per week their child is physically active for at least thirty minutes. **Approximately half of the respondents indicated that their child was physically active 6-7 times a week (54.7%) for at least thirty minutes at a time.** Figure 10.4 details the relationship between weight status category and amount of physical activity.

- Children that were physically active less often (1-2 times per week) were more likely to be underweight, as compared to children that were physically active throughout the week (6-7 times per week). *However*, very few respondents (1.6%) with a valid BMI indicated that their child only engaged in physical activity 0-1 times a week.
- Children who were physically active 6-7 times per week were more likely to be in the Healthy Weight Category compared to children who were less active.

**Figure 10.4: Child's Weight Status Category by Amount of Physical Activity Per Week**

(2011-2012  $n = 3,596$ )



#### Amount of Physical Activity

Note. These findings are significant at  $p < .001$ . \* indicates percentages are calculated out of the total number of Valid BMI responses in each race/ethnicity category.

## WEIGHT AND HEALTHY BEHAVIORS

### Television Viewing

In the current study, the majority of parents reported that their child watches some television but less than 4 hours during a weekday. The 2007 National Survey of Children's Health reported data regarding the amount of television or videos children ages 1-5 years watch (CDC, 2007). Compared to the national data:

- Fewer parents in the current sample reported that their children did not watch television, which could be due to the age difference in the samples.
- Fewer parents in the current sample reported that their children watch 4 or more hours of television.

**Table 10.3 Average Television Watched During a Weekday**

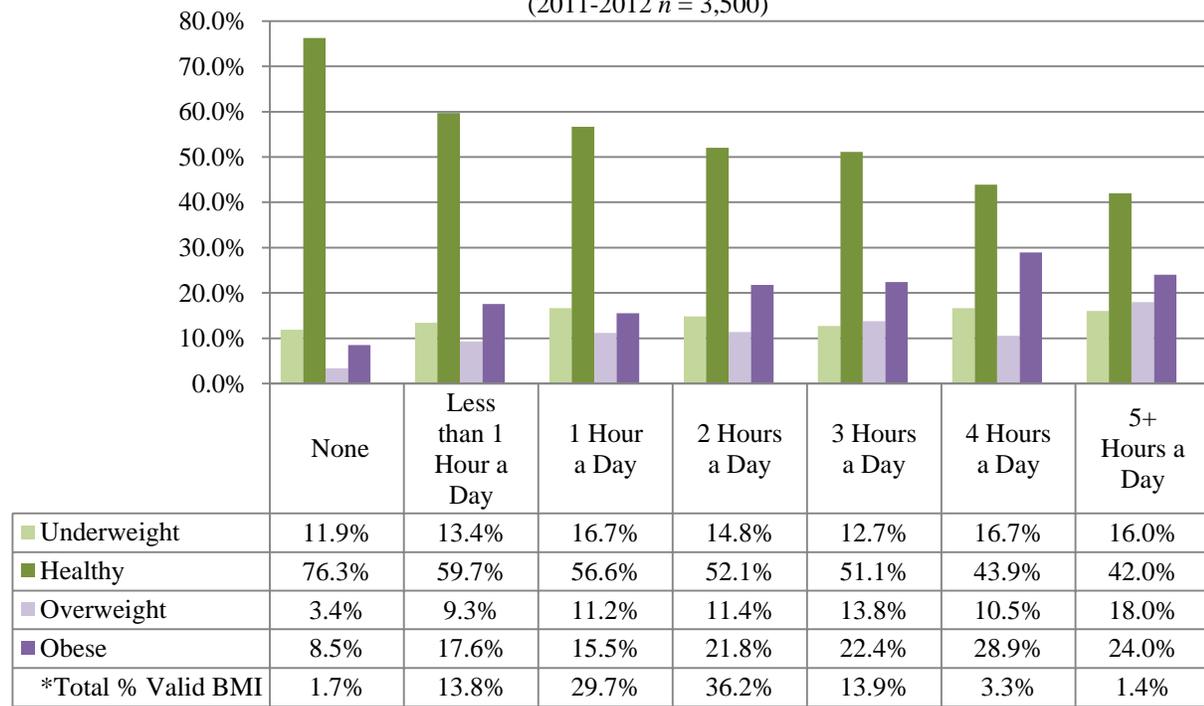
	None	1 hour or less	Between 1hr & 4 hrs	4 hours or more	Total %
Nationwide	7.9	37.7	41.6	12.8	100.0
Nevada	6.1	28.8	49.1	16.0	100.0
KHS Sample	1.7	40.7	51.7	5.9	100.0

Note. Nationwide/Nevada data source: <http://childhealthdata.org/browse/survey/results?q=869&r=1&r2=30>

When comparing the amount of hours a child watches television per day with his or her BMI, it appears that as children's TV viewing time increases, it is more likely that he/she will be overweight or obese.

**Figure 10.5: Child's Weight Status Category by Hours of Television Watched per Day**

(2011-2012 n = 3,500)



Hours of Television Watched

## WEIGHT AND HEALTHY BEHAVIORS

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

### Video Game Use

According to the High School Youth Risk Behavior Survey, 26.2 percent of youth in Nevada used computers 3 or more hours for something that that was not related to school in 2009, which was slightly above the national average of 24.9 percent (CDC, 2009b). To determine similar activity in children entering kindergarten, this same question was included on the survey starting this year.

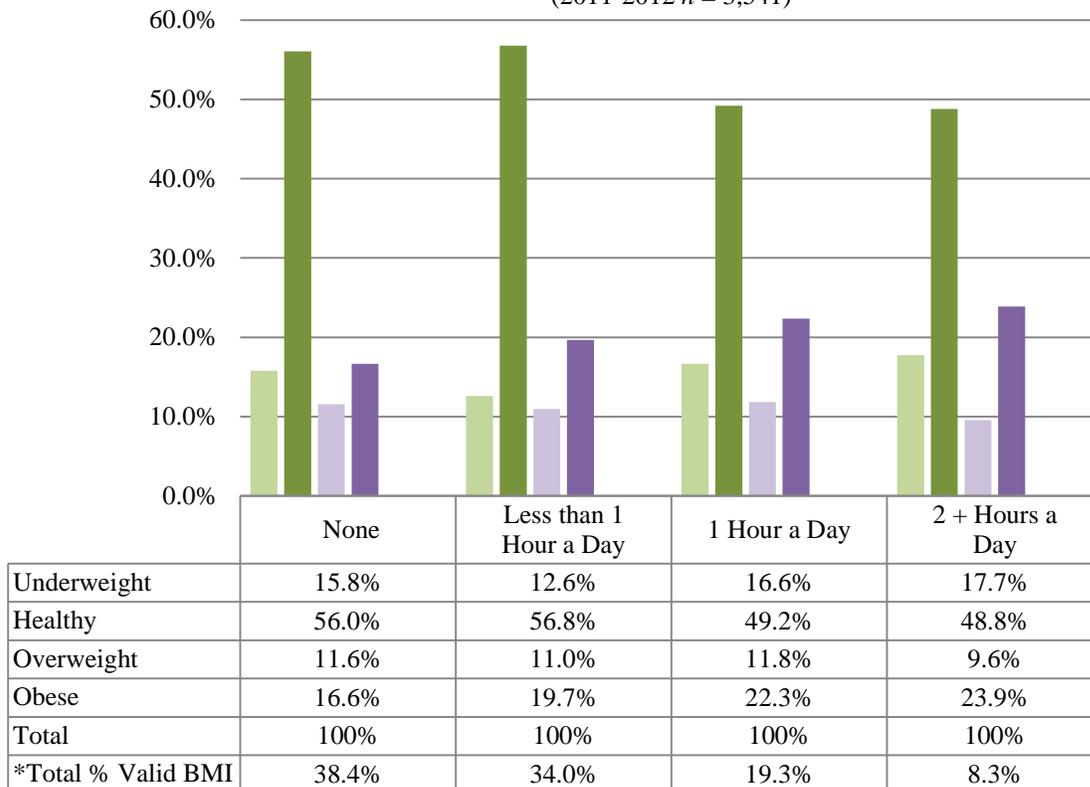
Results indicate that:

- the majority of children either do not play video or computer games on a school day (40.3%) or play one hour or less (50.0%),
- and these numbers are fairly consistent across all counties (Clark, Rural, and Washoe).

When looking at the amount of hours it is reported that children play video games per day, over half of the children in the zero and one hour of video game playing conditions are in the healthy weight range (56.0% and 56.8%, respectively). Obesity rates increase as the amount of video game play increases. Among those children that reportedly play two or more hours of video games per day, 23.9% are obese, compared to 16.6% who reportedly do not play video games.

**Figure 10.6: Child's Weight Status Category by Hours of Video Game Playing Per Day**

(2011-2012 n = 3,541)



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

## WEIGHT AND HEALTHY BEHAVIORS

### Soda Consumption

According to the 2009 High School Youth Risk Behavior Survey, 22.1 percent of youth in Nevada drank a can, bottle, or glass of non-diet soda/pop at least one time per day during the past 7 days before the survey was administered, which was slightly below the national average of 29.2 percent (CDC, 2009b). To determine similar activity in children entering kindergarten, this same question was included on the survey starting this year.

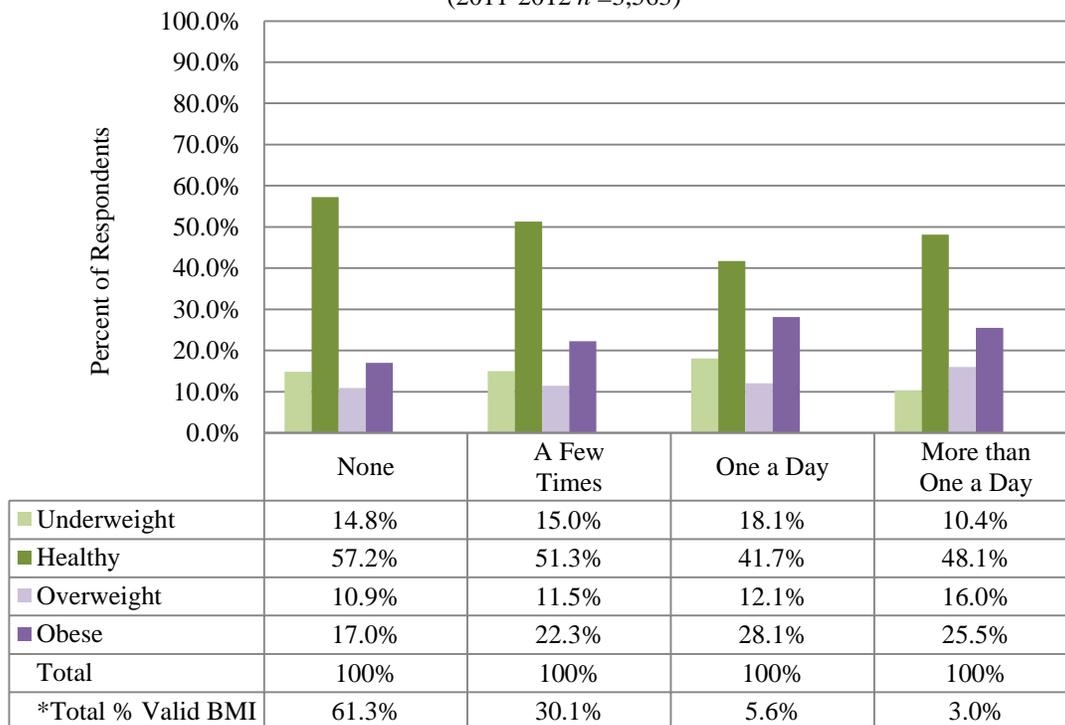
Results indicate that:

- The majority of children either did not drink any non-diet soda/pop (55.0%) or drank some a few times per week (34.2%).
  - These numbers are fairly consistent among all counties (Clark, Washoe, and the Rural counties),
- 6.7% of parents reported that their child drank non-diet soda/pop once a day, and 4.1% indicated that their child drank non-diet soda/pop more than once a day.
  - These proportions are slightly less in Washoe County, compared to the other two counties, and highest in Clark County.

Figure 10.7 illustrates child's weight status category by number of non-diet sodas/pops consumed in one week's time. Most respondents reported that their children had less than one soda a day. When just examining these two categories (None and a few times in a week), there is a 31.2% increase in children who are obese.

**Figure 10.7: Child's Weight Status Category by Number of Non-Diet Sodas Consumed in a Week**

(2011-2012  $n=3,563$ )



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

## WEIGHT AND HEALTHY BEHAVIORS

Similarly, a new question included on this year's survey asked the parents/guardians to indicate the level of consumption of diet soda/pop products. Although this question was asked on the High School Youth Risk Behavior Survey, this data was not available for comparison at the time of this report.

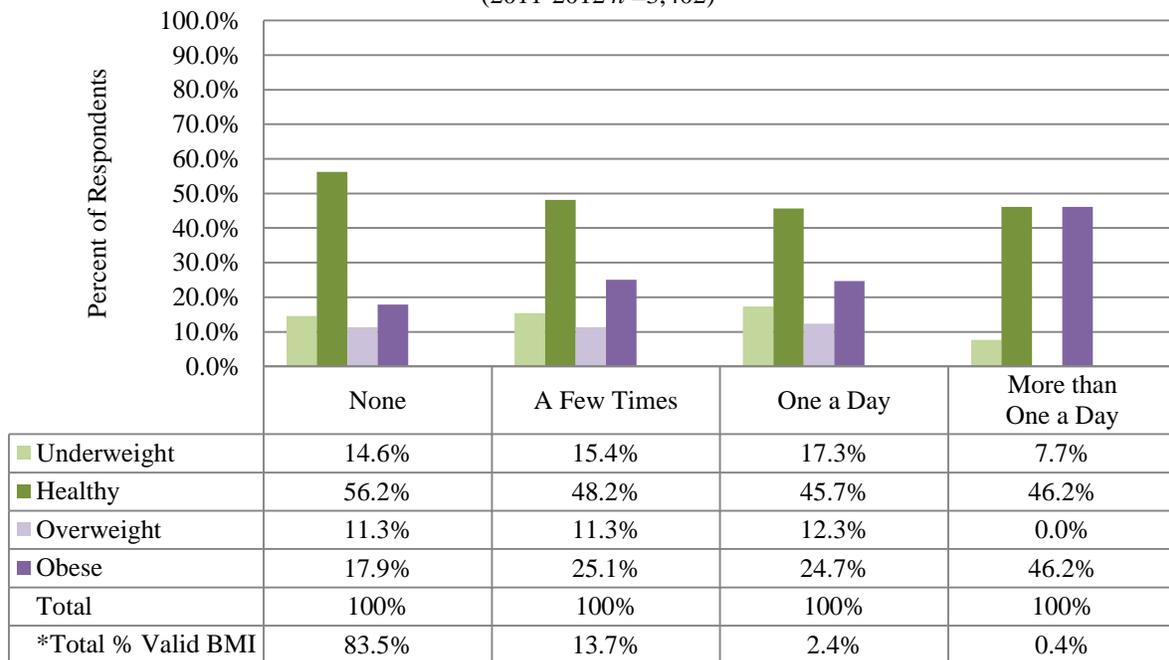
Results indicate that:

- The majority of children in the current study did not drink any diet soda/pop during the week (82.0%) which was consistent across all counties.
- 14.7 % reported that their child drank diet-soda/pop a few times a week, 2.6% reported daily consumption, and .7% reported consumption more than once a day.
  - These numbers are fairly consistent among all counties (Clark, Rural, and Washoe).

Much like Figure 10.7, when looking at children's weight status category by number of diet sodas drank in one week, many of the same trends appear (Figure 10.8). The majority of respondents stated that their children drink less than one soda a day ("a few times a week"). Over half of the children that drank no sodas were in the healthy range (56.2%). Again, obesity rates increase as number of diet sodas increase per week.

**Figure 10.8: Child's Weight Status Category by Number of Diet Sodas Consumed in a Week**

(2011-2012  $n=3,402$ )



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

## APPENDIX A: SUMMARY OF 2011-2012 SURVEY RESULTS BY COUNTY

Table 11.1 below outlines the percentages of responses for the 2011-2012 school year survey results by county. Even though a total of 8,534 surveys were received, not all respondents answered every question. All percentages calculated are based on the total number of people answering the question, rather than the total number of people who completed a survey. In addition, the percentages for Table 11.1 represent percentages by county; therefore for each response category, percentages will total 100% within each county and not across all counties.

**Table 11.1 Comparison of 2011-2012 Data by County**

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Survey Participation</i>	--	64.3	12.3	23.4
<i>Demographic Information</i>				
<i>Gender of Kindergartner</i>				
Male	50.6	49.7	51.3	52.9
Female	49.4	50.3	48.7	47.1
<i>Race/Ethnicity of Kindergartner</i>				
African American/Black	5.1	7.4	1.3	0.8
Asian/Pacific Islander	5.8	7.4	6.3	1.2
Caucasian	42.4	34.9	47.8	60.3
Hispanic	31.0	34.7	28.9	22.0
Native American/ Alaska Native	1.8	0.8	1.2	4.6
Other Race	0.7	0.7	1.2	0.7
Multiple Races	13.2	14.1	13.3	10.5
<i>Annual Household Income of Survey Respondents</i>				
\$0-\$14,999	17.2	17.6	15.7	17.0
\$15,000-\$24,999	15.2	15.2	14.8	15.6
\$25,000-\$34,999	13.0	12.8	13.6	13.4
\$35,000-\$44,999	8.9	8.9	8.5	8.9
\$45,000-\$54,999	7.4	7.2	8.3	7.6
\$55,000-\$64,999	7.0	6.9	6.0	7.8
\$65,000-\$74,999	6.2	6.2	6.3	6.2
\$75,000-\$84,999	6.1	5.9	5.5	7.1
\$85,000-\$94,999	3.9	4.1	2.8	4.0
\$95,000+	15.1	15.3	18.7	12.5

APPENDIX A: SUMMARY OF 2011-2012 SURVEY RESULTS BY COUNTY

Table 11.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Type of School Kindergartner Attended in the Past 12 Months</i>				
Head Start	12.3	10.3	14.2	16.7
Private	25.6	24.5	27.7	27.6
Home-Based	5.9	6.2	5.3	5.6
School/University/Campus	12.4	11.3	10.5	16.3
None/Stayed at Home	41.6	45.6	40.1	31.5
Other	1.1	1.1	1.0	1.1
Multiple	1.0	0.9	1.3	1.1
<i>Single Parent or Guardian</i>	29.8	30.5	30.0	27.9
<i>Average # of Children in Household (Standard Deviation)</i>	2.1 (0.8)	2.1 (0.8)	2.1 (0.8)	2.0 (0.7)
<i>Average # of Adults in Household (Standard Deviation)</i>	2.6 (1.2)	2.6 (1.2)	2.4 (1.1)	2.6 (1.2)
<i>Average Age of Mother/Guardian (Standard Deviation)</i>	32.9 (6.7)	33.0 (6.5)	33.4 (7.0)	32.3 (7.1)
<i>Average Age of Father/Guardian (Standard Deviation)</i>	35.7 (7.5)	35.7 (7.4)	36.1 (7.6)	35.2 (7.8)
<b><i>Health Insurance Status and Access to Health Care</i></b>				
<i>Health Insurance Type</i>				
Uninsured	12.3	12.5	10.9	12.5
Private	48.8	48.8	50.1	48.1
Medicaid	23.6	23.3	22.7	25.2
Nevada Check-up	6.4	6.4	8.0	5.6
Other	6.4	6.8	5.7	5.4
Multiple Types	2.5	2.2	2.5	3.2
<i>Kindergartner Does NOT Have a Primary Care Provider</i>	15.9	15.4	14.0	18.2

APPENDIX A: SUMMARY OF 2011-2012 SURVEY RESULTS BY COUNTY

Table 11.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<b><i>Routine Care and Health Status of Kindergartner</i></b>				
<i>Types of Barriers Experienced When Trying to Access Healthcare</i>				
Lack of Transportation	3.1	3.4	2.0	3.1
Lack of Insurance	11.1	11.0	9.8	11.9
Lack of Quality Medical Providers	4.6	3.2	5.3	8.3
Lack of Money/Financial Resources	13.1	12.0	14.5	15.6
Other Barriers	1.5	1.1	2.4	1.7
<i>Respondent has Experienced Difficulties When Attempting to Access Mental Health Services for Kindergartner</i>	29.3	29.1	32.7	29.7
<i>Has Not Had Routine Check-Up</i>	13.8	12.8	12.5	17.4
<i>Has Not Visited a Dentist in the Last Year</i>	27.1	29.0	19.0	26.1
<i>Has Had a Cavity in Lifetime</i>	44.0	41.8	49.2	47.1
<i>Amount of Times the Kindergartner Has Gone to the ER for a Non-Life-Threatening Illness or Injury in the Past 12 Months</i>				
None (0)	78.6	80.1	79.4	74.2
1 to 2	19.9	18.4	19.6	24.2
3 to 5	1.3	1.3	1.0	1.4
6 to 9	0.1	0.1	0.0	0.1
10 or More	0.1	0.1	0.0	0.1
<i>Types of Medical Conditions Seen in Kindergartners</i>				
Asthma	7.2	7.5	6.4	6.8
Glasses/Contacts	3.8	3.6	2.9	4.8
ADD/ADHD	1.3	1.0	1.3	2.3
Seizures	0.6	0.7	0.1	0.9
Hearing Aid/Impairment	0.4	0.3	0.5	0.5
Physical Disability	0.2	0.1	0.0	0.5
Mental Health Condition	0.3	0.2	0.2	0.6
Diabetes	0.1	0.1	0.0	0.1
Cancer	0.1	0.1	0.1	0.1
Other Condition	7.0	6.8	6.5	8.0

APPENDIX A: SUMMARY OF 2011-2012 SURVEY RESULTS BY COUNTY

Table 11.1 *continued*

Survey Indicator	State (Percent)	Clark County (Percent)	Washoe County (Percent)	Rural Counties (Percent)
<i>Respondents Ability to Follow Doctor's Recommendations for Medications and/or Follow-Up Visits</i>				
All of the Time	84.3	83.9	85.0	84.9
Most of the Time	10.0	9.6	10.3	10.7
Some of the Time	3.2	3.6	2.6	2.7
Never	2.5	2.8	2.0	1.7
<i>Weight and Healthy Behaviors</i>				
<i>Kindergartner's Weight Status</i>				
Underweight	14.9	15.3	15.4	13.6
Healthy Weight	54.3	54.4	55.6	53.1
Overweight	11.3	11.3	8.6	12.9
Obese	19.5	19.1	20.3	20.3
<i>Amount of Times per Week that Child Has at Least 30 Minutes of Physical Activity</i>				
0-1 Times	2.7	3.3	1.8	1.6
2-3 Times	15.0	18.0	12.3	8.3
4-5 Times	27.6	29.7	26.6	22.3
6 or More Times	54.7	49.0	59.3	67.9
<i>Hours of Television Watched on an Average School Day</i>				
None	1.7	1.6	1.4	2.0
Less Than One	11.6	9.4	17.6	14.6
1 Hour	29.1	27.8	32.5	30.8
2 Hours	36.0	37.0	32.3	35.0
3 Hours	15.7	17.3	11.9	13.3
4 Hours	4.0	4.6	3.0	3.1
5 Hours or More	1.9	2.3	1.1	1.2
<i>Hours of Video or Computer Games Played on an Average School Day</i>				
None	40.3	37.6	43.1	46.2
Less Than One	29.5	28.3	33.3	30.8
1 Hour	20.5	23.2	16.4	15.4
2 Hours	7.3	8.2	5.5	5.8
3 Hours	1.7	2.0	1.2	1.2
4 Hours	0.4	0.5	0.2	0.4
5 Hours or More	0.3	0.3	0.2	0.2

## APPENDIX A: SUMMARY OF 2011-2012 SURVEY RESULTS BY COUNTY

**Table 11.1 continued**

<b>Survey Indicator</b>	<b>State (Percent)</b>	<b>Clark County (Percent)</b>	<b>Washoe County (Percent)</b>	<b>Rural Counties (Percent)</b>
<i>Number of Times Per Week the Kindergartner Drinks Non-Diet Soda</i>				
None	55.0	54.2	57.4	56.0
A Few Times	34.2	34.1	34.9	34.3
Once a Day	6.7	7.1	5.6	6.2
More Than Once a Day	4.1	4.6	2.1	3.5
<i>Number of Times Per Week the Kindergartner Drinks Diet Soda</i>				
None	82.0	82.3	82.9	80.6
A Few Times	14.7	14.2	14.8	16.1
Once a Day	2.6	2.7	2.1	2.6
More Than Once a Day	0.7	0.8	0.2	0.7

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**APPENDIX B:  
COMPARISON OF SURVEY RESULTS BY SURVEY YEAR**

Table 11.2 below outlines the percentages of responses for the 2008-2009, 2009-2010, 2010-2011, and 2011-2012 school year survey results. Even though a total of 8,534 surveys were received, not all respondents answered every question. All percentages calculated are based on the total number of people answering the question, rather than the total number of people who completed a survey. In addition, the percentages for Table 11.2 represent percentages by year; therefore for each response category, percentages will total 100% within each year and not across all years.

**Table 11.2 Comparison of 2008-2009 through 2011-2012 Data**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>	<b>2011-2012 (Year Four) (Percent)</b>
<i><b>Survey Participation by School District</b></i>				
Clark County	78.9	59	65.1	64.3
Washoe County	8.8	17.6	14.1	12.3
Rural Counties	12.4	23.4	20.8	23.4
<i><b>Demographic Information</b></i>				
<i><b>Gender of Kindergartner</b></i>				
Male	50.2	49.8	49.8	50.6
Female	49.8	50.2	50.2	49.4
<i><b>Race/Ethnicity of Kindergartner</b></i>				
African American/Black	5.9	5.7	5.6	5.1
Asian/Pacific Islander	6.0	6.3	6.2	5.8
Caucasian	40.1	43.5	40.5	42.4
Hispanic	33.4	35.1	34.0	31.0
Native American/Alaska Native	0.9	2.1	1.4	1.8
Other Race	0.4	0.5	0.9	0.7
Multiple Races	13.4	6.7	11.4	13.2

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 11.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>	<b>2011-2012 (Year Four) (Percent)</b>
<i>Annual Household Income of Survey Respondent</i>				
\$0-\$14,999	12.9	15.7	19	17.2
\$15,000-\$24,000	14.3	14.5	16	15.2
\$25,000-\$34,999	13.8	13.1	12.8	13.0
\$35,000-\$44,999	9.8	9.2	9.3	8.9
\$45,000-\$54,000	9.1	8.2	7.5	7.4
\$55,000-\$64,999	7.5	6.9	6.6	7.0
\$65,000-\$74,999	-	7.2	5.9	6.2
\$75,000-\$84,999	-	6.4	5.5	6.1
\$85,000-94,999	-	4.6	3.9	3.9
\$95,000 +	-	14.3	13.4	15.1
<i>Type of School Child Attended in the Past 12 Months</i>				
Head Start	-	12.6	11.2	12.3
Private	-	21.3	18.0	25.6
Home-Based	-	8.2	10.5	5.9
School/University/Campus	-	7.2	10.0	12.4
None/Stayed at Home	-	38.2	37.7	41.6
Other	-	9.8	10.7	1.1
Multiple	-	2.8	1.9	1.0
<i>Single Parent or Guardian</i>	-	-	-	29.8
<i>Average # of Children in Household (Standard Deviation)</i>	-	-	-	2.1 (0.8)
<i>Average # of Adults in Household (Standard Deviation)</i>	-	-	-	2.6 (1.2)
<i>Average Age of Mother/Guardian (Standard Deviation)</i>	-	-	-	32.9 (6.7)
<i>Average Age of Father/Guardian (Standard Deviation)</i>	-	-	-	35.7 (7.5)

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 11.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>	<b>2011-2012 (Year Four) (Percent)</b>
<i>Health Insurance Status and Access to Health Care</i>				
<i>Health Insurance Type</i>				
Uninsured	19.1	18.6	16.6	12.3
Private	58.6	47.6	39.4	48.8
Medicaid	12.3	16.7	22.8	23.6
Nevada Check-Up	7.0	6.1	5.8	6.4
Other	1.7	9.1	13.6	6.4
Multiple Types	1.3	1.9	1.7	2.5
<i>Kindergartner Does Not Have a Primary Care Provider</i>	21.0	19.5	18.9	15.9
<i>Types of Barriers Experienced When Trying to Access Healthcare</i>				
Lack of Transportation	1.5	2.2	2.0	3.1
Lack of Insurance	10.9	13.3	12.3	11.1
Lack of Quality Medical Providers	2.4	3.0	2.8	4.6
Lack of Money/Financial Resources	10.9	10.0	12.6	13.1
Other Barriers	1.1	1.3	1.2	1.5
<i>Respondent Has Experienced Difficulties Attempting to Access Mental Health Services for Kindergartner</i>	34.5	32.2	34.7	29.3

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 11.2 continued**

Survey Indicator	2008-2009 (Year One) (Percent)	2009-2010 (Year Two) (Percent)	2010-2011 (Year Three) (Percent)	2011-2012 (Year Four) (Percent)
<b><i>Annual Household Income of Uninsured Kindergartners</i></b>				
\$0-\$14,999	26.4	26.3	26.9	24.1
\$15,000-\$24,999	26.1	25.8	28.4	26.0
\$25,000-\$34,999	19.3	18.9	17.2	17.8
\$35,000-\$44,999	11.5	10.9	10.7	10.1
\$45,000-\$54,999	7.1	6.4	6.3	7.4
\$55,000-\$64,999	3.8	4.2	3.8	5.5
\$65,000-\$74,999	-	3.6	2.2	3.8
\$75,000-\$84,999	-	2.0	1.7	2.9
\$85,000-94,999	-	0.5	0.7	0.6
\$95,000 +	-	1.5	2.0	1.9
<b><i>Race/Ethnicity of Uninsured Kindergartners</i></b>				
African American/Black	3.8	4.9	4.1	4.5
Asian/Pacific Islander	3.9	4.2	5.1	4.9
Caucasian	22.7	26.6	25.6	30.1
Hispanic	58.6	55.5	54.1	47.3
Native American/Alaska Native	1.2	2.2	1.8	1.9
Other Race	0.5	0.4	0.7	0.9
Multiple Races	9.3	6.2	8.6	10.4
<b><i>Routine Care and Health Status of Kindergartner</i></b>				
<i>Kindergartner Has NOT Had Routine Check-Up In Past Year</i>	17.1	16.3	15.8	13.8
<i>Kindergartner Has NOT Visited Dentist in Past Year</i>	32.5	29.7	28.9	27.1
<i>HAS Had a Cavity in His/Her Lifetime</i>	--	43.9	44.1	44.0
<b><i>Amount of Times the Kindergartner Has Gone to the ER for a Non-Life-Threatening Illness or Injury in the Past 12 Months</i></b>				
None (0)	75.2	80.0	80.6	78.6
1 to 2	22.6	18.6	18.1	19.9
3 to 5	2.1	1.3	1.1	1.3
6 to 9	0.2	0.0	0.1	0.1
10 or More	0.1	0.1	0.1	0.1

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 11.2 continued**

<b>Survey Indicator</b>	<b>2008-2009 (Year One) (Percent)</b>	<b>2009-2010 (Year Two) (Percent)</b>	<b>2010-2011 (Year Three) (Percent)</b>	<b>2011-2012 (Year Four) (Percent)</b>
<i>Types of Medical Conditions Seen in Kindergartners</i>				
Asthma	4.8	8.2	8.1	7.2
Glasses/Contacts	2.1	3.6	4.2	3.8
ADD/ADHD	0.7	1.2	1.0	1.3
Seizures	0.2	0.9	0.8	0.6
Hearing Aid/Impairment	0.5	0.4	0.4	0.4
Physical Disability	0.2	0.3	0.3	0.2
Mental Health Condition	0.2	0.3	0.3	0.3
Diabetes	0.1	0.2	0.1	0.1
Cancer	0.04	0.1	0.1	0.1
Other Condition	5.1	7.4	7.4	7.0
<i>Kindergartner with No Insurance Has a Possible Undiagnosed Medical Condition</i>	2.2	3.4	3.3	-
<i>Respondents Ability to Follow Doctor's Recommendations for Medications and/or Follow-Up Visits</i>				
All of the time	83.8	86.2	84.3	84.3
Most of the time	12.4	7.0	10.3	10.0
Some of the time	2.5	4.5	2.8	3.2
Never	1.4	2.3	2.6	2.5
<i>Kindergartner Has NOT Been Tested for Lead Poisoning</i>	83.9	83.2	79.9	-
<b><i>Immunization Information</i></b>				
<i>Respondent Would Not Immunize Kindergartner if it Was Not Required</i>	5.6	5.5	6.5	-
<i>Immunization Locations Used by Respondent</i>				
Primary Care Provider	65.6	67.3	68.1	-
Health District	16.5	11.7	12.0	-
School-based Clinic	1.7	0.9	0.6	-
Community Health Clinic	8.7	10.4	9.8	-
Other Location	7.5	2.5	2.2	-
Multiple Locations	-	7.2	7.2	-

Note. – indicates data is not available.

## APPENDIX B: COMPARISON OF SURVEY RESULTS BY SURVEY YEAR

**Table 11.2 continued**

Survey Indicator	2008-2009 (Year One) (Percent)	2009-2010 (Year Two) (Percent)	2010-2011 (Year Three) (Percent)	2011-2012 (Year Four) (Percent)
<i>*Kindergartner's Weight Status</i>				
Underweight	10.8	15.5	15.0	14.9
Healthy Weight	57.1	53.4	51.5	54.3
Overweight	15.4	11.9	11.9	11.3
Obese	16.7	19.2	21.7	19.5
<i>Times A Week Kindergartner Does at Least 30min of Physical Activity</i>				
0-1 Times	-	2.5	2.6	2.7
2-3 Times	-	14.2	16.3	15.0
4-5 Times	-	25.5	27.2	27.6
6 or More Times	-	57.9	54	54.7
<i>Hours of Television Watched on an Average School Day</i>				
None	-	-	-	1.7
Less Than One	-	-	-	11.6
1 Hour	-	-	-	29.1
2 Hours	-	-	-	36.0
3 Hours	-	-	-	15.7
4 Hours	-	-	-	4.0
5 Hours or More	-	-	-	1.9
<i>Hours of Video or Computer Games Played on an Average School Day</i>				
None	-	-	-	40.3
Less Than One	-	-	-	29.5
1 Hour	-	-	-	20.5
2 Hours	-	-	-	7.3
3 Hours	-	-	-	1.7
4 Hours	-	-	-	0.4
5 Hours or More	-	-	-	0.3
<i>Number of Times Per Week the Kindergartner Drinks Non-Diet Soda</i>				
None	-	-	-	55.0
A Few Times	-	-	-	34.2
Once a Day	-	-	-	6.7
More Than Once a Day	-	-	-	4.1
<i>Number of Times Per Week the Kindergartner Drinks Diet Soda</i>				
None	-	-	-	82.0
A Few Times	-	-	-	14.7
Once a Day	-	-	-	2.6
More Than Once a Day	-	-	-	0.7

Note. – indicates data is not available. \* indicated data has been adjusted from previous years due to formula changes.

# APPENDIX C: SURVEY INSTRUMENT



## 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 will have a child in kindergarten. All information from this survey will be used to discuss children's health on a group level. Your child's name will never be connected to your responses in any way or known by the researchers. **All information in this survey is confidential.**

**Name of elementary school:** \_\_\_\_\_ **Annual household income (check one)** **Your HOME zip code:** \_\_\_\_\_

**Child's age:** \_\_\_\_\_  \$0 -\$14,999 **Are you a single parent/guardian?**  
 \$15,000 -\$24,999  Yes  No

**Child's gender:** Male Female  \$25,000 -\$34,999

**Child's weight:** \_\_\_\_\_ pounds  \$35,000 -\$44,999

**Child's height:** \_\_\_\_\_ ft. \_\_\_\_\_ in. (12in = 1ft)  \$45,000 -\$54,999

**Child's race / ethnicity:**  \$55,000 -\$64,999 **Total number of children in your household: (ages 0-17):** \_\_\_\_\_

African American  Asian / Pacific Islander  \$65,000 -\$74,999 **Total number of adults in your household: (ages 18+):** \_\_\_\_\_

Caucasian  Hispanic / Latino  \$75,000 -\$84,999 **Age of child's mother/ guardian:** \_\_\_\_\_

Native American / Alaska Native  \$85,000 -\$94,999 **Age of child's father/ guardian:** \_\_\_\_\_

Other (please specify): \_\_\_\_\_  \$95,000 +

**Please answer the following questions for the child that is enrolled in kindergarten this year.**

- Please select the type of medical insurance your child currently has? (check all that apply)  
 None/Uninsured  Private (Employer/Union)  
 Medicaid  Nevada Check-Up  
 Other \_\_\_\_\_
- Has your child been seen by a medical provider for a routine check-up (not an illness) in the *past 12 months*?  
 Yes  No
- Does your child have a primary care provider (regular doctor, nurse practitioner, or physician's assistant)?  
 Yes  No
- Has your child seen a dentist in the *past 12 months*?  
 Yes  No
- Has your child ever had a cavity?  Yes  No
- Within the *last 12 months*, how many times have you taken your child to the Emergency Room (not Urgent Care) for an illness or injury that was not life-threatening?  
 None (0)  1-2  3-5  6-9  10 or more
- Please select the medical conditions listed below that your child has: (check all that apply)  
 None  ADD / ADHD  
 Asthma  Glasses / Contacts  
 Cancer  Hearing Aid / Impairment  
 Diabetes  Mental Health Condition  
 Seizures  Physical Disability  
 Other (specify) \_\_\_\_\_
- Please select any barriers you experienced when accessing health care for your child? (check all that apply)  
 None  Lack of transportation  
 Lack of insurance  Lack of good medical providers  
 Lack of money  Other (specify): \_\_\_\_\_
- 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) \_\_\_\_\_
- In general, are you able to follow your doctor's recommendations for medications and/or follow-up visits?  
 All of the time  Some of the time  
 Most of the time  Never  
 If you did not say "All of the time", please explain why not: \_\_\_\_\_
- In general, how many times a week does your child do at least 30 minutes of physical activity? (circle one)  
 0 1 2 3 4 5 6 7
- On an average school day, how many hours does your child watch TV? (circle one)  
 None Less than one 1 2 3 4 5 +
- On an average school day, how many hours does your child play video or computer games? (Xbox, Nintendo, tablets, and/or the internet). (circle one)  
 None Less than one 1 2 3 4 5 +
- During the past 7 days**, how many times did your child drink a can, bottle or glass of...  
 Non-diet soda or pop? (check one)  
 None  A few times  Once a day  More than once a day  
 Diet soda or pop? (check one)  
 None  A few times  Once a day  More than once a day
- What type of pre-school did your child attend most often in the *past 12 months*? (check one)  
 None / Stayed home  Home-based  
 School / University Campus (name) \_\_\_\_\_  
 Head Start (name) \_\_\_\_\_  
 Private (name) \_\_\_\_\_

**PLEASE RETURN THIS SURVEY TO YOUR CHILD'S TEACHER BY FRIDAY, SEPTEMBER 16, 2011**

Thank you for your participation. If you are interested in participating in future research, please contact the Nevada Institute for Children's Research and Policy at (702) 895-1040 or via email at Amanda.Haboush@unlv.edu.

**TEACHERS:** Please return the survey to your school's front office, or mail to:

**NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154**

# APPENDIX C: SURVEY INSTRUMENT



## Cuestionario de Salud de Kinder

**ESTIMADOS PADRES DE FAMILIA O GUARDIAN:** La siguiente encuesta ha sido diseñada por Nevada Institute for Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboración con el Centro de Salud de Sur de Nevada y el Distrito Escolar del Condado. La información adquirida en este estudio se utilizará para ayudar a comprender la salud de los niños que comienzan la escuela preescolar este año. Le hemos pedido que participe porque usted tiene un niño en la escuela preescolar. Toda la información obtenida será utilizada para discutir y estudiar el nivel de salud colectiva del grupo. Nunca habrá conexión entre el nombre de su niño(a) y sus respuestas. **Todo información en este estudio será confidencial.**

Nombre de la escuela primaria: \_\_\_\_\_ Ingreso anual del hogar (cheque uno) Su código postal CASERO: \_\_\_\_\_  
 Edad del niño(a): \_\_\_\_\_  \$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 +  
 Sexo del niño(a): Masculino Femenino **Es usted padre/tutor soltero?**  Sí  No  
 Peso del niño(a) : \_\_\_\_\_ libras **Total de niños(as) viviendo en casa:** (edades 0-17): \_\_\_\_\_  
 Estatura del niño(a): \_\_\_\_\_ ft. \_\_\_\_\_ in. (12in = 1ft) **Total de adultos viviendo en casa:** (edades 18+): \_\_\_\_\_  
**Etnicidad del Niño(a)** **Edad de la madre/tutor del niño:** \_\_\_\_\_  
 Afro Americano  Asiático / Isleño Pacífico  \$75,000 -\$84,999  \$85,000 -\$94,999  \$95,000 +  
 Caucásico  Hispano / Latino  Nativo Americano / Nativo de Alaska  Otro (especifique): \_\_\_\_\_  
**Edad del padre/tutor del niño:** \_\_\_\_\_

**Por favor conteste las siguientes preguntas sobre el niño(a) que se va a matricular en kinder este año.**

- Por favor seleccione el tip de seguro medico que su hijo o hija tenga actualmente. (cheque todo que apliqué)  
 Ninguno/No asegurado  Privado (Empleador/Union)  
 Medicaid  Nevada Check-Up  
 Otro \_\_\_\_\_
- ¿Su niño(a) ha sido visto por un proveedor de servicio médico este año para un examen de rutina (no por enfermedad) en los últimos 12 meses?  
 Sí  No
- ¿Tiene su niño(a) un medico familiar (médico, enfermera de práctica o asistente de médico)?  
 Sí  No
- ¿Ha visto su niño(a) a un dentista en los últimos 12 meses?  
 Sí  No
- ¿Ha tenido su niño(a) caries?  Sí  No
- ¿En los últimos 12 meses, ¿cuántas veces ha tenido que llevar a su niño(a) a la sala de emergencias por una enfermedad o lesión sin peligro la vida?  
 Ninguna (0)  1-2  3-5  6-9  10 o mas
- Por favor seleccione todas las condiciones medicas que tenga su niño(a):  
 Ninguno  ADD/ADHD  
 Asma  Lentes/ de Contacto  
 Cáncer  Oído/Discapacidad Auditiva  
 Diabetes  Condición de Salud Mental  
 Convulsiones  Discapacidad física  
 Otra (especifique) \_\_\_\_\_
- ¿Se ha enfrentado con obstáculos en el acceso de salud para su hijo? (cheque todo que apliqué)  
 Ninguno  Falta de transportacion  
 Falta de aseguransa  Falta de proveedores médicos de calidad  
 Falta de of dinero  Otro(especifique): \_\_\_\_\_
- ¿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 servicios?  
 No  Sí (especifique) \_\_\_\_\_
- ¿En general, ¿Puede seguir recomendaciones del médico en cuanto a medicamentos o seguimiento de las visitas?  
 Todo el tiempo  Algunas veces  
 La mayor parte del tiempo  Nunca  
 Si no contesto "Todo el tiempo", por favor especifique porque:  
 \_\_\_\_\_
- ¿En general, ¿Cuantas veces a la semana hace su niño(a) por lo menos 30 minutos de actividad fisica? (circulé una)  
 0 1 2 3 4 5 6 7
- ¿En un día normal de escuela, cuántas horas ve su hijo o hija la tele? (circulé una)  
 Ninguna Menos de una 1 2 3 4 5 +
- ¿En un día normal de escuela, cuántas horas juega su hijo o hija juegos de video o en la computadora? (Xbox, Nintendo, tabletas o internet). (circulé una)  
 Ninguna Menos de una 1 2 3 4 5 +
- Durante los últimos 7 días**, cuántas veces bebió su hijo o hija una lata, botella, o vaso de...  
 ¿Soda regular o pop? (cheque uno)  Ninguno  
 Algunas veces  Una vez al día  Más de una vez al día  
 ¿Soda de dieta o pop? (cheque uno)  Ninguno  
 Algunas veces  Una vez al día  Más de una vez al día
- ¿Que tipo de escuela preescolar atendio su niño(a) mas en los últimos 12 meses? (cheque uno)  
 Badado en Casa  Ninguna/Permaneció en la Casa  
 Campamento en Escuela/Universidad (nombre) \_\_\_\_\_  
 Head Start (nombre) \_\_\_\_\_  
 Privada (nombre) \_\_\_\_\_

**VUELVA POR FAVOR ESTA INSPECCION A MAESTRO DE SU NIÑO POR EL VIERNES, SEPTIEMBRE 16, 2011**

Gracias por su participación. Si esta interesado en participar en investigaciones futuras por favor contacte al Nevada Institute for Children's Research and Policy al (702) 895-1040 o por email al Amanda.Haboush@unlv.edu .

**MAESTROS/TEACHERS:** Please return the survey to your school's front office, or mail to:

**NICRP, Kindergarten Health Survey, 4505 Maryland Parkway, Box 453030, Las Vegas, NV 89154**

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## **Summary of Findings**

To gain baseline information on the health status of children entering the school system and better track student health status, the Nevada Institute for Children's Research and Policy (NICRP), in partnership with the state's 17 school districts, the Southern Nevada Health District (SNHD), and the Nevada State Health Division, conducted a health survey examining the health status as well health insurance status of Nevada's children entering kindergarten. This study was conducted with the goal of quantifying the health status of children as they enter school to be able to identify specific areas for improvement to eventually increase academic success among Nevada's students.

The survey had a 36% response rate, with a total of 11,073 surveys received from parents in 15 school districts statewide. 78.85% of the surveys were from Clark County, with 8.8% from Washoe County and 12.35% from the rural counties. Some of the findings include:

### Demographics:

- Over 27% of respondents (n=9,600) had an annual household income of less than \$25,000 (nearly 13% of those were less than \$15,000); nearly one-third had an annual household income of \$65,000 or more.
- The race/ethnicity of respondents (n=10,529) included: Caucasian (40%); Hispanic (33%); African American (6%); Asian (4.63%); Pacific Islander (1%); Native American/American Native (1%); and Multiple/Other (14%).

### Insurance Status:

- 18.41% of parents indicated that their kindergartener was not currently covered by medical insurance (slightly higher than the Families USA statistics for uninsured children of all ages in Nevada, 15.8%).
- Over half of the uninsured children lived in households with an annual household income below \$25,000.
- Hispanic children were disproportionately uninsured, making up over 58% of the uninsured population for this survey (compared to 33% of total respondents).

### Routine Care:

- Over 17% of respondents indicated that their child had not had a routine medical check up within the past 12 months.
- Nearly 21% of respondents indicated that their child did not have a primary care provider (PCP). 66% of uninsured children had no PCP, compared to only 10% of insured children.
- Children without a PCP were far less likely to have received a routine check up in the past 12 months (48% without a PCP and 8.8% with a PCP).

### Dental Care:

- 32.46% of respondents indicated that their child had not seen a dentist within the past 12 months.

### Care for Illness or Injury:

- Nearly 25% of respondents indicated that they had taken their child to an ER or Urgent Care facility for a non-life threatening illness or injury at least once over the past 12 months.

- 61% of respondents indicated that they had taken their child to their primary care provider at least once in the past 12 months for an illness or injury.

#### Medical Conditions:

- Almost 12% of respondents indicated that their child had a medical condition that requires special treatment.
- The conditions included: asthma/airway disorder (34%); glasses/contacts (15%); ADD/ADHD (5%); Hearing Aid/Impairment (4%); and others including mental conditions, physical disabilities, seizures, diabetes, cancer, allergies, dental problems, chronic infections and digestive disorders.
- Just over 2% of respondents indicated that they thought their child had a medical condition that they had not seen a doctor for. 35% of these respondents were uninsured.

#### Immunizations:

- The majority of respondents indicated that their child's most recent immunization was given by a primary care provider (65.6%). Other locations included: health district (16.5%); community health clinic (8.68%); school based health clinic (1.69%); and other (military facilities, WIC providers, non-immunized children, etc.) at 7.5%.
- When asked if they would have their child immunized if it were not required before school entry, 603 parents indicated that they would not.

#### Lead Screening:

- Just over 16% of respondents indicated that their child had been tested for lead poisoning.

#### Access to Healthcare:

- Over 16% of respondents encountered barriers to accessing healthcare for their child, including: lack of insurance (40.59%); lack of financial resources (40.59%); lack of quality medical providers (8.92%); lack of transportation (5.7%) and other.
- Nearly 84% of parents responded that they were able to follow the doctor's recommendations "all of the time"; 1.4% indicated they were never able to follow the doctor's recommendations, primarily due to financial barriers.

#### Mental Health:

- Only 3.37% of respondents indicated that they had tried to access mental health services for their child.
- Of those who had tried to access mental health services, over one-third reported having trouble accessing services (particularly for the uninsured and low income groups).

#### Weight and Health Behaviors:

- BMI's were calculated for 3,667 respondents who provided information on the child's height and weight.
- Of those who responded, nearly 36% were overweight (25%) or at risk of overweight (11%). African American and Native American/Alaska Native children were disproportionately represented in the overweight category at 38.9% and 30.8%, respectively.

*For the full report, please visit the Nevada Institute for Children's Research and Policy website at <http://nic.unlv.edu>.*

*Data for specific counties (and/or schools for Washoe and Clark Counties) may also be available upon request. Please contact NICRP at (702) 895-1040 for additional information.*

To gather additional 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 the Clark County School District, Nevada school district superintendents, the Nevada Head Start State Collaboration and Early Childhood Comprehensive Services Office, and the Nevada State Health Division, conducted a health survey of children entering kindergarten in Nevada. In the fall of 2009, NICRP distributed questionnaires to all public elementary schools in the state, with the exception of schools in Esmeralda and Clark counties. Esmeralda County, a rural county with 5 kindergarteners enrolled in the 2009-2010 school year, chose not to participate in the survey, while the Clark County School District requested that only a sample of their schools be included in the survey.

The survey had an overall response rate of 39.2 percent, with a total of 9,504 surveys received from parents in 16 school districts statewide. Survey respondents from Clark County comprised 59.0 percent of the sample, while 17.6 percent of respondents were from Washoe County and 23.4 percent were from the remaining rural counties. Some of the key findings from this survey include:

***Household Income:*** 30.2 percent of respondents had an annual household income of less than \$25,000, while 52.5 percent of respondents had an annual household income of less than \$45,000.

***Exposure to Pre-School or Early Childhood Education:*** 38.2 percent of kindergarteners had not attended a pre-school or early childhood education program in the previous year.

***Insurance Status:*** 17.8 percent of kindergarteners were not covered by health insurance. Over half (52.1 percent) of these uninsured children lived in households with an annual household income of less than \$25,000. Of the kindergarteners with health insurance, 58.5 percent had private insurance, while 27.9 percent were covered by either Medicaid or Nevada Check Up.

***Access to Health Care:*** 79.6 percent of respondents indicated that they had not experienced barriers when accessing health care. Of those who did experience barriers, most barriers were related to either a lack of health insurance or a lack of funds necessary for health care services. Just 3.9 percent of respondents have tried to access mental health services for their kindergartener, but of those that had, 32.2 percent reported having trouble accessing services.

***Routine Care:*** 83.7 percent of kindergarteners had received a routine medical check-up in the twelve months prior to the survey, while 80.5 percent of kindergarteners had a primary care provider. Of the kindergarteners that did not have a primary care provider, 48.4 percent have also not had a routine check-up in the last year. Nearly 30 percent of kindergarteners have not seen a dentist in the past twelve months.

***Health Status:*** 19.6 percent of kindergarteners have a medical condition requiring special treatment. Approximately 42 percent of respondents provided information on their kindergartener's weight, height, age, and gender; of these kindergarteners, 47.8 percent were of a healthy weight, while 25.3 percent were considered obese.

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To gather additional 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, Nevada school district superintendents, and the Nevada State Health Division, conducted a health survey of children entering kindergarten in Nevada. In the fall of 2010, NICRP distributed questionnaires to all public elementary schools in the state, with the exception of the Clark County School District that requested only a sample of their schools be included in the survey.

The survey had an overall response rate of 43.6 percent, with a total of 10,487 surveys received from parents in 17 school districts statewide. This response rate is approximately 8 percent higher compared to the year 1 (36%). Survey respondents from Clark County comprised 65.1 percent of the sample, while 14.1 percent of respondents were from Washoe County and 20.8 percent were from the remaining rural counties. Some of the key findings from this survey include:

**Household Income:** 35 percent of respondents had an annual household income of less than \$25,000, while 57 percent of respondents had an annual household income of less than \$45,000. More families are earning less compared to the previous two years of the survey.

**Insurance Status:** 16.6 percent of kindergarteners were not covered by health insurance and over half (55.3 percent) of these uninsured children lived in households with an annual household income of less than \$25,000. However the percent of children without insurance has decreased by 2.5 percentages points since 2008—2009. In addition, the percent of children enrolled in public insurance ( 28.6) has increased by almost 10 percentage points since 2008-2009.

**Access to Health Care:** 80.2 percent of respondents indicated that they had not experienced barriers when accessing health care. Similar to previous years, of those who did experience barriers, most barriers were related to either a lack of health insurance or a lack of funds necessary for health care services. Just 4.1 percent of respondents have tried to access mental health services for their kindergartener, but of those that had, 34.7 percent reported having trouble accessing services. In addition, individuals in rural areas reported more difficulty compared to those in Clark or Washoe County.

**Routine Care:** 84.2 percent of kindergarteners had received a routine medical check-up in the twelve months prior to the survey, and 81.1 percent of kindergarteners had a primary care provider. Of the kindergarteners that did not have a primary care provider, 49.2 percent had also not had a routine check-up in the last year. 28.9 percent of kindergarteners have not seen a dentist in the past twelve months which is a slight decrease from 2008-2009 results (32.5%).

**Health Status:** 22.7 percent of kindergarteners have a medical condition requiring special treatment. Approximately 42 percent of respondents provided information on their kindergartener's weight, height, age, and gender; of these kindergarteners, 47.8 percent were of a healthy weight, while 21.1 percent were considered obese.

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